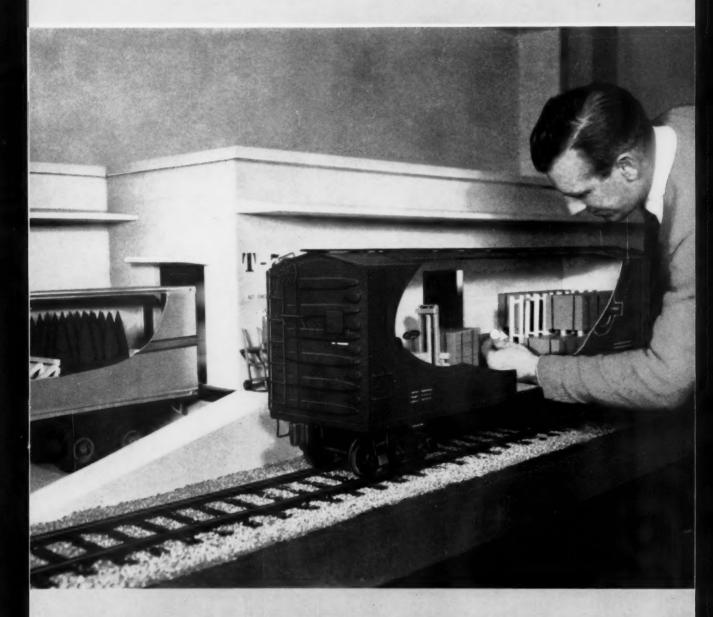
DISTRIBUTION AGE

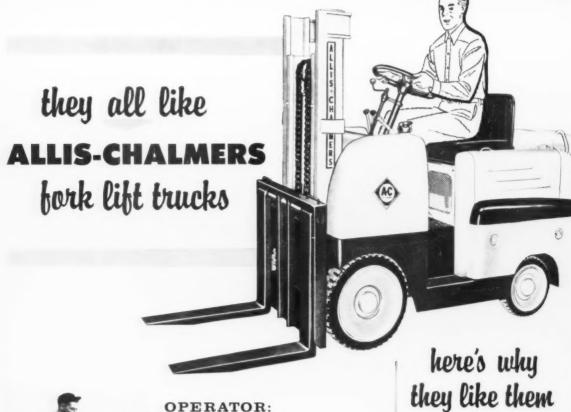


A CHILTON TO PUBLICATION



"Model" Training Program Reduces Damages 90.7%.

Pages 40-41





"Must have been engineered for the driver." says the operator of an Allis-Chalmers fork truck at a midwest foundry. "Shifting is handy and I like where the controls are located. Have plenty of room for driving."

Important controls are right where an operator would like to have them. Gauges are in plain sight, easy to read. Floor is clear, operator steps on or off either side.



SERVICEMAN:

"Finest truck from a mechanic's point of view," is the comment of the lift truck fleet serviceman at a midwestern plant. "In over 3,000 hours of operation, the Allis-Chalmers truck has caused no trouble at all."

It takes only 22 seconds to strip an Allis-Chalmers fork truck for servicing-only 22 minutes for two men to disassemble right down to the bare frame.



PRESIDENT:

"Would like you to know how well satisfied we are," writes the president of an eastern warehousing company. Operating up and down a steep ramp had caused exceptionally heavy clutch repair costs with older trucks, but "we have yet to experience our first clutch trouble with an Allis-Chalmers truck."

Allis-Chalmers fork lift trucks were the first with optional torque converter drive - which eliminates clutch problems, saves shifting, provides torque to handle steep grades with ease.

Join the growing list of satisfied Allis-Chalmers fork truck users. You'll find it profitable in every way. See your dealer or write direct for more information on trucks to fit your needs.



BAKER announces an ALL NEW PNEUMATIC-TIRED FORK TRUCK



This Baker FGF-40, 4,000-lb. Yardloader, first in the new line of Baker pneumatic-tired gas fork trucks, has many new design features for greater maneuverability and more dependable performance. It is fast—top speed with load, 8.6 mph. It is compact—only 48 inch wheelbase, and minimum overhang—and only 79 inch turning radius. Low center of gravity makes this possible without sacrificing stability.

Absence of cowl provides maximum visibility. Power steering and many other driver conveniences make it one of the easiest handling fork trucks—and one of the safest. Full 130-inch lift, with single or dual cylinder. Truck-loading mast available with 110-inch lift and 71-inch overall height... For complete information ask for Bulletin 1382.

Baker

THE BAKER-RAULANG COMPANY

1216 WEST 80th STREET . CLEVELAND 2, OHIO

industrial trucks

A Subsidiary of Otis Elevator Company







Joseph Lampert, Superintendent, starts one of the White 3000's on its way.

over the road...



F. V. Andrews General Superintendent. dispatches one of the White WC24TD's.

WHITE extra earning power proved by Weicker fleet

> R. G. Dameron, President Weicker Transfer & Storage Co. Denver, Colo.

HIGH MILEAGES and big payloads on the highway...

Time and cost savings with the most modern pick-up and delivery service ...

That's the report from Weicker Transfer & Storage Co., Denver, Colo., with their all-White fleet shown below.

White WC24TD Diesel Tractors over-the-road.

White 3026 city trucksthat is the Weicker winning combination!



THE WHITE MOTOR COMPANY

CLEVELAND 1, OHIO

For More Than 55 Years The Greatest Name In Trucks



A. W. GREENE, Editor

Wm. A. Barbour, Managing Editor Robert Warner, Assistant Editor C. M. Thompson, Editorial Assistant George Baker, Ray M. Stroupe, N. R. Regeimbal, Washington News Editors Elwyn Knight, West Coast Editor Howard Kohlbrenner, Art Director Marcus Ainsworth, Statistician

EDITORIAL CONSULTANTS

Leo T. Parker, Legal
D. O. Haynes, Materials Handling
M. W. Potts, Materials Handling
John H. Frederick, Transportation
J. A. Sargeant, Packaging

BUSINESS

ROBERT E. McKENNA. Publisher George Post, Production Manager

EASTERN STATES

H. S. Webster, Jr. 100 E. 42nd St., New York 17, N. Y. Telephone: Oxford 7-3400

CENTRAL STATES

930 Keith Bldg., Cleveland 15, Ohio Telephone: SUperior 1-2861

MIDDLE WEST STATES

Kenneth A. Syfrit 360 No. Michigan Ave., Chicago I, Ild. Telephone: RAndolph 6-2166

SOUTHERN STATES

John W. Sangston Harold Mott Wilkiam Smyth 621 Petroleum Bldg., Tulsa, Okla. Telephone: LUther 4-1769

WESTERN STATES

Don May 1355 Market St., San Francisco 3, Cal. Telephone: UNderhill 1-9737

Jack Kay 198 S. Alvarado, Los Angeles 57, Cal. Telephone: DUnkirk 7-4337

JOS. S. HILDRETH, Board Chairman

JOS. S. HILDRETH, Board Chairman G. C. BUZBY, President Vice Presidents: P. M. Fahrendorf, Harry V. Duftv. Treasurer, William H. Vallar; Secretary, John Blair Moffett; Directors, George T. Hook, Maurice E. Cox, Frank P. Tighe, Leonard V. Rowlands, Robert E. McKenna, Irving E. Hand, Everit B. Terhune, Jr., Russell W. Case, Jr., John C. Hildreth, Jr.; Washington Member of the Editorial Board, Paul Wooton.

Executive, Editorial & Advertising Offices: Chestnut & 56th Sts. Philadelphia 39. Pa. SHerwood B-2000









THE COVER

Scale truck and railroad car models are used in Navy training program which cuts damages. See Page 40

DISTRIBUTION AGE

Vol. 56, No. 4

ESTABLISHED 1901

April, 1957

CONTENTS

FEATURES —	
Chambers of Commerce in Traffic Management John H. Frederick Transportation committees vary in size, functions, and importance with city size and needs	37
Terminal Modernization Raises Efficiency J. F. Smalley New truck line headquarters is serving as testing ground for innovations at other terminals	38
"Model" Training Program Reduces Damages 90.7%Albert Fernances Navy's loss and damage prevention seminar features model cars and trucks to teach loading	40
Selection and Training of Terminal Personnel	44
What Can Be Done About Damages? L. E. Galaspie More crew training, development of new cars, and interchange of new cars can cut claims	46
Route Service System Speeds Paperwork Process	48
Plant Relocation Cures Industrial Growing Pains Gustave D. Cederholm When relocation is being considered, the traffic manager is expected to supply facts	50
A Second Look at Trailership Service Eric Rath New maritime shipping era opens as largest roll-on, roll-off ship initiates U. S-Europe nun	52
Modern Terminal Design Terminal modernization includes every phase of the operation from building to paperwork	55
Zip-in Liner for Highway Trailers Speeds Handling of Jumbled Loads	56
Unusual Applications of Basic Materials Handling Equipment	57
DA Previews Seventh Material Handling Show and Conference	58
Working Words of the Railroads	70
Traffic Men Suggest Ideal Boxcar	71
DA Handling Equipment Primer—Part XIX D. O. Haynes A discussion of principles involved in the operation of outside storage areas and platforms	75
Furniture Warehousemen "Spotlight Performance"	100
DEPARTMENTS	_
Chuting the News 11 Washington DA Coming Events 20 New Products Men in the News 20 Free Literature On The Line 25 Within the Law	31 62 68 98

Accepted as controlled circulation publication at Philadelphia, Pa. Copyright 1957 by Chilton Co. Published monthly. Subscription rates:
U. S. \$5 per year: Canada, \$5.50 per year; foreign Countries, \$6 per year. Single Copies 50¢ each, except February Directory Number—\$4 per copy.

Letters to the Editor 26

Warehouse Spotlight 101



CONCRETE PRODUCTS: The Automatic TRANSPORTER above is one of three platform models which work indoors and out, day and night, in all kinds of weather including rain, snow and ice for the *Permacrete Products Corp.*, makers of precast concrete products.

Automatic TRANSPORTER

LEADS ITS FIELD IN COMPACTNESS...

EFFICIENCY...ECONOMY

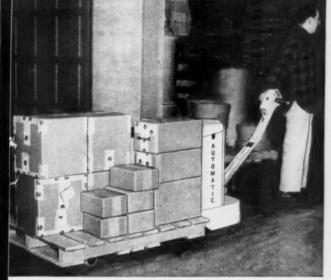
Automatic TRANSPORTERS are available in many different types...low and high lift platform...low and high lift pallet...fork, straddle, and retractable mast type stackers...tractors. These short, compact trucks perform all the handling functions of standard rider-type trucks, yet cost is considerably lower.

Completely new streamlined design reduces aisle space requirements and facilitates maneuvering in tight quarters. In all models, the flexibility, economy and dependability of electric power at its best are combined with many exclusive operating advances developed by Automatic engineering. Capacities range from 1,000 to 10,000 lbs., depending upon the model. A complete line of attachments is available.

But compare...see for yourself the outstanding superiority of Automatic TRANSPORTERS.

Figures below are for low lift pallet model comparison but other TRANSPORTERS show equally impressive advantages.

	CAPACITY	TRANSPORTER 6,000 LBS.	TRUCK A 6,000 LBS.	FRUCK B	TRUCK C 6,000 LBS.	FRUCK D 6,000 LBS.
SHORTER	Overall length less load	21½"	25¾"	263/8"	23¾"	24"
MANEUVERABLE	Maximum Overall width	29"	32"	32"	27″	321/4"
BETTER INCHING CONTROL	3-speed Travel Control	Yes	No	No	No	No
MAXIMUM MOTOR HEAT PROTECTION	Class H Silicone insulated motor	Yes	No	No	No	No
MORE EFFICIENT	Hand or foot lowering control	Both	Hand Only	Hand Only	Hand Only	Hand Only



PHARMACEUTICALS & CHEMICALS: The above pallet model TRANSPORTER and other Automatic trucks help move many tons of products per month at the warehouse of Chas. Pfizer & Co., Inc., 107-year-old drug and chemical firm.



FOOD SPECIALTIES: Pallet model TRANSPORTER shown here hauling sugar from receiving dock to storage is part of an Automatic "team" which, last year, enabled Jules Weber, Inc., of New York to increase capacity of storage area by 69% without new construction.



TAGS & LABELS: This high lift fork model TRANSPORTER is used by Central Tag Co., to handle and tier 800 lb. paper rolls in storage, also to deliver them to the presses.



VALVES & METERS: Marked improvement resulted in handling finished parts when this TRANSPORTER went to work for Rockwell Mfg. Co. The TRANSPORTER carries parts successively from finishing through inspection and weighing to final assembly.

SEND FOR SPECIFICATIONS & CASE HISTORIES

Send today for complete information including case histories of installations similar to your own where TRANSPORTERS are cutting materials handling costs to a minimum. Also get the facts about Automatic's exclusive lease or purchase plan. Example: A low-lift platform Transporter can be leased from 24c* per hour average, complete with battery and charger.

*Based on 60 months lease term, 20 eight-hour working days per month.



Dept. D-7, 115 West 87th St. Chicago 20, III.

WORLD'S LARGEST EXCLUSIVE BUILDER
OF ELECTRIC-DRIVEN INDUSTRIAL TRUCKS

Write today for TRANSPORTER DATA



Complete data on Automatic TRANSPORTERS is yours for the asking. Also case histories of installations similar to yours and facts about lease or purchase plan. Just attach this coupon to your company letterhead and sign your name. Address AUTOMATIC... Dept. D-7, 115 West 87th Street, Chicago 20, Illinois.

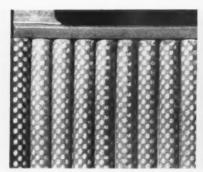
Circle No. 4 on Card, Facing Page 69, for more information



Get more work from your NEW TG EXIDE-



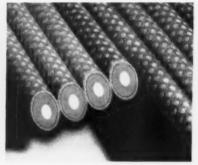
NEW POSITIVE AND NEGATIVE PLATES - DEVELOPED



New tubular construction of positive plate! Armored porous tubing. Provides resistance to corrosion and effects of vibration, improved flexibility, and maximum retention of active material. Thousands of tiny openings mean...



Greater porosity. Highly permeable tubes ease current flow, reduce internal resistance, improve access of electrolyte. Battery will deliver more power to meet sudden heavy loads. Tubes hold...



More active material. Chief source of battery power. Larger inside diameter of tubes means every positive plate contains more active material per cubic inch of plate. And for maximum capacity and long life, there's a...

electric industrial trucks IRONCLAD BATTERY

Want more work hours-no increase in battery size? You get 44% more capacity in the new TG Exide-Ironclad Battery. For example, you can replace a 500 ah battery with a 720-in the same size. This means your trucks can do more work. They can earn a great deal more on your investment in them

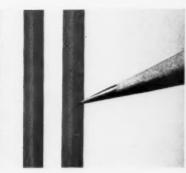
Satisfied with the work capacity of your present battery? Then get it at the lowest cost to own and operate-and get the newest, most advanced electric industrial truck on the market today.

Packs 44% more power into same battery space . . . priced to give you even greater battery economy

Want even lower operating cost and improved performance from your electric industrial trucks? Here Exide makes it possible. The new TG Exide-Ironclad Battery combines challenging new materials with an ingenious overall new design to produce the highest capacity per cubic inch of any battery available today. It's the most dramatic increase in capacity and the biggest step forward in power per dollar in history. This new battery can benefit every user of electric industrial trucks.

Learn more about the operating and expense advantages. Call your nearby regional Exide representative. Or write for complete information. Exide Industrial Division, The Electric Storage Battery Company, Philadelphia 1, Pa.

OUT OF RESEARCH STARTED 15 YEARS AGO



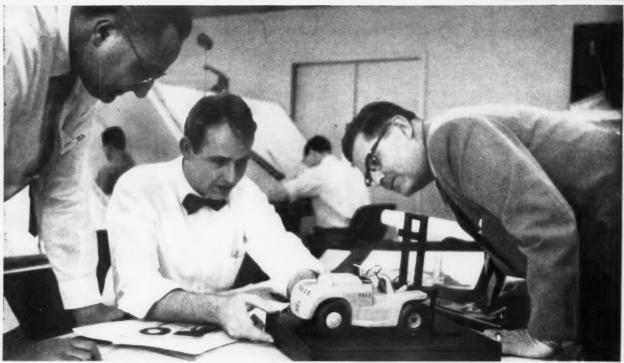
Thicker negative plate. Specially designed to Plus Silvium,* Exide's exclusive grid alloy match the increased capacity of the new positive plates. Plate is both thicker and stronger You get all these advantages . . .



proved more corrosion resistant than other leading grid alloys. Silvium is a patented and possesses better electrical characteristics. combination of metals designed to prolong



The Electric Storage Battery Company



NEW ADVANCES IN RESEARCH AND ENGINEERING

Spearheading the development of new materials handling methods and equipment are the creative engineering staffs of the Yale Research Center in Valley Forge, Pa., and of the Yale Philadelphia Plant. Among the Yale advances of recent months: Yale "Integrated Design" Gas and Electric Trucks; the shortest rider-type electric truck; automated Yale hoist systems. In future months, Yale will give industry even more dramatic advances.

EXPANDED SALES AND SERVICE FACILITIES

Today, a total of 83 Yale Sales and Service Offices, located throughout the United States and Canada, offer quick, on-the-spot attention to your specific needs. Each unit is staffed with highly qualified materials handling salesmen and factory-trained service personnel.



EXPANDED PRODUCTION FACILITIES >

New Yale plant in San Leandro, California will meet industry's need for ready availability of industrial lift trucks in the West (right). In addition, the production capacity of Yale's headquarters plant in Philadelphia has been increased to further meet industry demand.

YALE BUILDS FOR THE

기록\\\ | 록 R\\\

Today, expanding industry is in the New Era of faster production and distribution of goods in greater volume than ever before. To meet the higher goals, progressive management demands bold, new—and practical—methods for handling materials of every type with greater speed, efficiency and cost control.

To this end, Yale builds—to offer industries of every type and size new scope in dealing with the handling problems created by rapid industrial growth. Yale builds with research and engineering—with aggressive inquiry into every facet of materials handling, with advances in equipment design and application.

Yale builds with expanded sales and service facilities — bringing industry into closer local contact with men of wide experience in the materials handling field. And, Yale builds with concrete evidence of its recognition of industry's need not only for industrial lift trucks and hoists that fill today's critical requirements, but also for their ready availability. Such evidence is the new Yale plant in San Leandro, California.

These most recent Yale developments, all geared to give industry better handling methods and faster service, will be followed by still others in the months ahead. Look for them—as Yale builds for the New Era.

YALE*

YALE & TOWNE

INDUSTRIAL LIFT TRUCKS AND HOISTS

GASOLINE, ELECTRIC & LP-GAS INDUSTRIAL LIFT TRUCKS . WORKSAVERS
WAREHOUSERS . HAND TRUCKS . HAND AND ELECTRIC HOISTS

THE YALE & TOWNE MANUFACTURING COMPANY, MATERIALS HANDLING DIVISION. MANUFACTURING PLANTS IN PHILADELPHIA. PA. AND SAN LEANDRO, CALIF.



YOU CAN RESERVE AIR FREIGHT SPACE ON ANY FLIGHT IN THIS TIMETABLE



On United, you can reserve Air Freight space the same way you reserve passenger space—and on any of 900 daily flights!

The same United timetable you use to get places quickly and comfortably can be used to schedule large or small Air Freight shipments (from pounds to tons).

Air Freight moves on *all* United flights. And United will reserve space for your shipment on whatever flight you select.

This is called "Reserved Air Freight." It's United's way of handling Air Freight shipments with all the speed, frequency and schedule dependability of regular passenger service. In fact, United will even pick up and deliver your shipment.

To guarantee the space you need on the flight you want, you simply call United's local Air Freight office three hours or more before flight time. They'll clear and hold the space for you.

No other airline does so much to make shipping so fast, so easy, so dependable. And at rates you'll find pleasantly surprising.

Door-to-door service



SHIP FAST...SHIP SURE...SHIP EASY

For service, information, or free Air Freight booklet, call the nearest United Air Lines Representative or write Cargo Sales Division, United Air Lines, 36 South Wabash Avenue, Chicago 3, Illinois.

Examples of United's Air Freight rates

								pounds*
CHICAGO to CLEVELAND								\$4.78
NEW YORK to DETROIT							•	5.90
DENVER to OMAHA								6.42
SEATTLE to LOS ANGELES .							-	9.80
PHILADELPHIA to PORTLAND				0	۰			24.15
SAN FRANCISCO to BOSTON	۰			٠				27.00

*These are the rates for many commodities. They are often lower for larger shipments. Rates shown are for information only, are subject to change, and do not include the 3% federal tax on domestic shipments.





Transportation Official



August C. Hahn (center), a postal career employe, is sworn in by Postmaster General Arthur Summerfield as the new deputy assistant postmaster general Bureau of Transportation. Mrs. Hahn looked on during the ceremony

Maritime Board to Investigate Terminal Practices in East

The Federal Maritime Board has initiated two investigations, according to an announcement by Chairman Clarence G. Morse.

The first deals with terminal practices in Atlantic and Gulf ports as they affect oceanborne commerce and trade. The second is an investigation of the status of express companies, truck lines, and others who purport to be common carriers by water but who do not control any vessels.

The terminal probe has been undertaken, Morse said, in response to requests from numerous port interests who urge a look into the reasonableness and lawfulness of charges. Among other things, the Board will examine the feasibility of rules designed to prescribe uniform definitions and applications of terminal services and charges.

Movers' and Warehousemen's Assn. of America Re-elects Entire Officer Slate in Houston

The entire slate of officers of the Movers' and Warehousemen's Association of America, Inc., was re-elected during the group's annual meeting held recently in Houston.

Returned to office were President James O. Delcher, of Jacksonville, Fla.:

A Freight Terminal Management Conference was held recently at Purdue University, Lafayette, Ind., under sponsorship of the West Michigan Chapter of the Operations Council, ATA, and the Indiana Motor Truck Association. Prof. D. A. Weaver, of the Motor Fleet Training Program, was in charge.

American Waterways Operators Re-elect Kogge and Thompson

-04-

Vincent A. Kogge, of Chicago, Ill., and Chester C. Thompson, of Washington, D. C., were re-elected chairman of the board and president, respectively, at the annual membership meeting of The American Waterways Operators, Inc.

Kogge is transporation manager of Marquette Cement Manufacturing Co. William E. Cleary, of New York City, was re-elected secretary-treasurer of the national association of the barge and towing vessel industry.

Regional vice presidents are:

Region 1, F. A. Mechling, Mechling Barge Lines, Inc.; Region 2, George P. Crounse, Crounse Corp.; Region 3, H. A. Guthans, Warrior and Gulf Navigation Co.; Region 5, J. Frank Belford, Jr., Seaboard Shipping Corp.

Executive Vice President John W. Geipe, of Baltimore, Md.; Secretary Richard H. Suddath, of Jackson-ville, Fla., and Treasurer Joseph W. Engel. of Elizabeth, N. J.

Lawrence Walrath, commissioner of the ICC, speaking at a luncheon meeting, called on the group to develop a scientific cost accounting system. He cited deficient cost studies as having affected past contests involving rates.

Other speakers were: Russell E. Garrett, chairman of the Movers Conference of America; Dilworth S. Woolley, president, Bekins Van and Storage Co.; Dan Dalberg, general manager, Westheimer Storage Co. of Houston; Robert W. Wilson, M&WAA Rates and Tariffs Committee chairman; and Herbert Burstein, M&WAA general counsel.

Day Heads Advisory Board

William H. Day, manager of the Greater Boston Chamber of Commerce Transportation Department, was re-elected general chairman of the New England Shippers Advisory Board at the group's annual meeting.

Robert L. Tavis, traffic manager, S. D. Warren Co., was elected vice general chairman, a newly created office, and H. J. Rogers, director of traffic of Heublein Inc., was elected general secretary.

(Please Turn Page)

Chuting the News . . .

(Continued from Preceding Page)

Association of ICC Practitioners Announces Program for 28th Annual Meeting May 15-16 in Chicago

The 28th Annual Meeting of the Association of Interstate Commerce Commission Practitioners will be held May 15-16 in the Conrad Hilton Hotel, Chicago.

Guest speakers will be U. S. Sen. George Smathers, of Florida, and Chairman Owen Clarke, of the ICC.

Participants will include ICC Commissioners Anthony F. Arpaia, Everett Hutchison, Donald P. Mc-Pherson, Jr., and Laurence K. Walrath; R. Granville Curry, Washington, D. C., attorney; Ashley Sellers, Washington, D. C.; Starr Thomas, general attorney and commerce counsel, ATS&F; David G. McDonald. Washington, D. C.; John P. Fishwick, general counsel, Norfolk and Western Railway; Harry C. Ames, Washington, D. C.: James J. Williams, ICC examiner: Kenneth F. Burges, of Chicago: and Roy V. Craig, general traffic manager, Allied Mills, Inc., Chicago.

"Public Service—Key to Success" will be the theme of the approaching 37th Annual Convention of the Canadian Warehousemen's Association to be held at Harrison Hot Springs, B. C., May 13-16 inclusive.

Dillworth New Leader Of Food Brokers Assn.

George E. Dillworth, Kierce and Dillworth, Inc., Detroit, was elected national chairman of the National Food Brokers Association. The election was held at the 53rd Annual Convention in Chicago.

Other officers are Sloan McCrea, Earl V. Wilson Co., first chairman; Arthur G. Curren, Jr., of Boston, second vice chairman; R. W. Madden, of Atlanta, third vice chairman; H. G. Alexander, Jr., Alexander-Spaulding Co., executive committee member-atlarge; and H. Wayne Clarke, Walter Leaman Co., treasurer.

ATA Group Lists 12 Dangers In Interchanging Trailers

__DA__

Motor common carriers interchanging trailers without written interchange agreements are very likely to become involved in disputes, according to the Regular Common Carrier Conference, ATA.

These disputes, which even may result in lawsuits, arise from the absence of a clear and written understanding between the carriers.

Failures to reach an agreement on the following have been found as frequent causes of disputes in the absence of written agreements:

Responsibility to the general public and to public authority.

Responsibility for losses resulting from permitting trailers to be used by third parties.

Exact amount of compensation including definition of a "day" and determining when compensation is due.

Time to retain trailers.

Time to return trailers.

Penalty for late return of trailers.

Responsibility for condition of trailer when returned.

Responsibility for repairs made to trailers.

Responsibility for maintenance of trailers.

Tires and tubes to be furnished by owner.

Responsibility for maintaining tires and tubes while trailer is in interchange use.

-- DA---

Time agreement is to run.

The Eastern Industrial Traffic League will hold its semiannual meeting at the DuPont Plaza Hotel, Washington, D. C., on April 17-18. Badley Nash, deputy under secretary of commerce for transportation, will be the principal speaker at the April 18 luncheon. Safe Shipping Award



Branch Express Co.'s Meyer J. Butensky (center), president, and Dan Gusaeff (right), claims manager, accept the company's seventh consecutive Safe Shipping Award from R. J. Barr, of Liberty Mutual Insurance Co. The engraved plaque is given in recognition of "outstanding performance in the field of loss prevention"

Common Carrier Conference— Irregular Route in Meeting

The Common Carrier Conference—Irregular Route of the American Trucking Associations, Inc., held its annual convention March 6-9 at Hollywood, Fla.

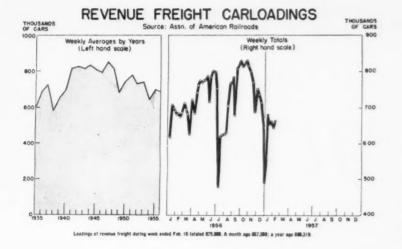
The following officers were elect-

P. D. Serra, Rand Express Freight Lines, Board chairman; Eldon Miller, of Eldon Miller, Inc., chairman; J. David Brothers, of New Dixie Lines, Inc., first vice chairman; Kern L. Smith, of Penn-Dixie Lines, Inc., second vice chairman; M. T. Richmond, of Mercury Motor Express, third vice chairman; Sidney Alterman, of Alterman Transport Lines, Inc., secretary; R. A. Peters, of Miller Transportation, Inc., treasurer; and Thomas F. Robertson, of Washington, D. C., executive director.

Four ICC Commissioners — Rupert L. Murphy, Robert W. Minor, John H. Winchell, and Donald P. McPherson, Jr.—participated in a panel discussion concerning unregulated carriers. Brothers was the moderator.

Clarence E. Killebrew was elected president of the Construction Industry Manufacturers Association at the organization's Annual Meeting last month, He is vice president of Clark Equipment Co.

-DA-



Operating Revenues of Class I Railroads Rise To More Than \$10-billion, ICC Announces

Operating revenues of class I line-haul railroads for 1956 amounted to \$10,551,000,000, it was reported recently by the ICC.

The new figure is 4.4 per cent more than the amount reported for 1955, and 1.1 per cent less than the all-time high of \$10,664,000,000 reported for 1953.

In 1956, the combined operating expenses, taxes and equipment and joint facility rents were 5.6 per cent above those for 1955. Railway operating expenses alone increased 6.1 per cent between 1955 and 1956

NITL Opposes Carrier Bill

Grant Arnold, president of the National Industrial Traffic League. on March 21 appeared before the Surface Transportation Subcommittee of the Senate Interstate and Foreign Commerce Committee to register NITL opposition to passage of S 1490.

The ICC-proposed bill would require interstate motor carriers subject only to the Commission's hours of service and safety regulations to file an annual report. This would consist of company name, location, and number of vehicles owned and operated. Senator George A. Smathers is chairman of the fiveman subcommittee.

while operating revenues rose only 4.4 per cent.

Net railway operating income totaled \$1,068,000,000 in 1956 as compared with \$1,129,000,000 in 1955, or 5.4 per cent less. Before Federal income taxes, the 1956 net was 5.5 per cent below the 1955 figure.

The carriers' net income after all charges totaled \$874,000,000 in 1956. This represents a decrease of 4.5 per cent below the \$915,000,-000 figure reported for 1955. It is, however, 29.1 per cent above the 1954 total.

The Advisory Council on Federal Reports has reorganized nine committees of businessmen to cooperate with the Bureau of the Census in a general revision of the U.S. Export Classifications, known as Schedule B.

Rate History Published

The National Small Shipments Traffic Conference Inc. has published a history of rate increases, it was announced recently by Harry F. Gillis, executive vice president. Copies are available from the conference office, The Mills Building, Washington 6, D. C.

The Middlewest Shipper-Motor Conference will hold its 18th regular meeting at Chicago, May 14-15.

Legislative Line-up

Following is a brief summary of legislative items pending in Washington. The status reported is as of March 14.

APPROPRIATIONS-Bills to provide money for the Treasury and Post Office Depts. (HR 4897) and Interior Dept. (HR 5189) have been passed by the House. Funds authorized in these hills would be available for spending

in the fiscal year beginning July 1.
FOREIGN FREIGHT FORWARD-ERS-HR 479, requiring that foreign freight forwarders be licensed by Federal Maritime Board, is not yet in line for hearings by the House Merchant Marine Committee.

GOVERNMENT COMPETITION-A subcommittee of the House Government Operations Committee is considering HR 1975. This bill would define the federal policy on the extent of government competition with private business.

HIGHWAY BUILDING-Hearings on the highway program resume be-fore a subcommittee of the Senate Public Works Committee on March 18. There is no action in the House Pub-Works Committee on bills to lengthen the interstate highway sys-

MINIMUM WAGES - Extensive hearings, lasting through April, were planned by a House Labor subcommittee on bills to extend the minimum wage law. A Senate Labor subcommittee was meeting on bills which also would change the minimum wage law.

POSTAL RATES - Newly introduced is the Eisenhower Administration bill, HR 5836, to raise the rate on letter mail to 4c. It would also provide for increases on second- and third-class mail. House Post Office Committee is given this bill.

SECONDARY BOYCOTTS-S. 76, to do away with secondary boycotts and "hot cargo" contracts, is not yet listed for hearings by the Senate Labor Committee.

TERMINAL TRAFFIC - Measures introduced in the House and Senate would call for more government-type traffic to be steered through commercial marine terminals. House bill is HR 2229. Senate measure is S 1481. They are referred to House Merchant Marine and Senate Commerce Committees, respectively

TRANSPORT POLICY-Revisions in the national transportation policy are proposed in HR 5521 and S 1457. These Eisenhower Administration bills await the attention of the House and Senate Commerce Committees.

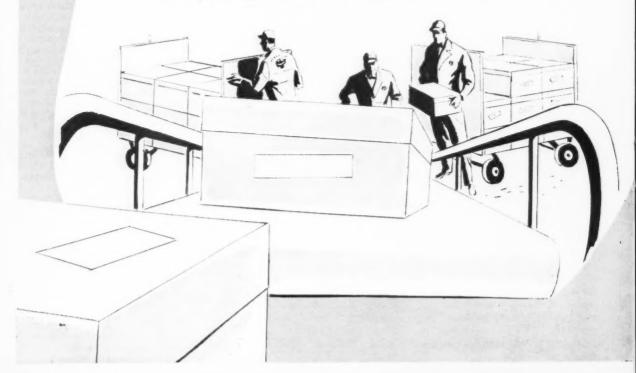
(Please Turn to Page 16)

CONTINENTAL AIR LINES INTRODUCES

NEW ALL DC-7B NEW ALL DC-7B PETWEEN

LOS ANGELES - DENVER CHICAGO - (*Kansas City service to start in July)

Effective April 28, Continental Air Lines—for nearly a quarter century serving airfreight shippers in the vast West and Southwest—will inaugurate its new, all DC-78 service between the Great Lakes and West Coast. If you're a shipper, you'll be interested in the many advantages Continental's new airfreight service has to offer:

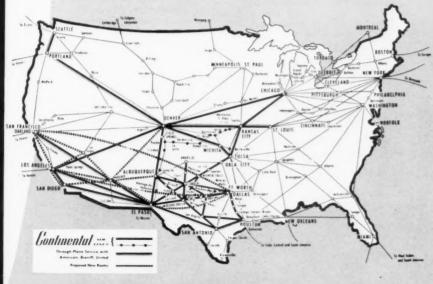


COMBINING ALL THE MOST WANTED FEATURES OF AIR FREIGHT SHIPPING INTO ONE NEW SERVICE:

Fast-New DC-7Bs on Every Flight: With Continental Air Freight, you specify the world's fastest airliners... the DC-7B... on every shipment. With the speed of Continental's DC-7Bs you can replenish dealer stocks in a hurry... give him your product when he wants it... when it's moving! That means faster turnover... more efficient use of your capital investment

Dependable-Overnight or Same-Day Deliveries: Continental Air Cargo can make you competitive with local manufacturers in markets thousands of miles away, because you can promise and fill same-day or nextday deliveries. What's more, Continental Air Freight shipping places your product on a prestige pedestal...makes your product more important to your customers or dealers...delivers your product looking its best —always "first line" merchandise. Positive-Reserved Space: If you have frequent, scheduled shipments, you can "Reserve Space" on Continental's DC-7Bs at no extra charge, and receive positive assurance of perfect timing on your shipments. As a result, you can reduce inventories by planning production to coincide with shipping ... practically eliminate the necessity of costly warehousing.

Safe-Individual Attention: Each and every piece of cargo on Continental's DC-7Bs receives intimate, "kid-glove" handling. Because of this "personalized" touch, expensive, costly packaging can be substantially reduced, with a subsequent reduction in tare weight. There's less chance of spoilage, pilferage or damage, too, when you ship Continental Air Freight.



Convenient-Connecting Service to and From Most Major West and Southwest Cities: Continental's DC-7Bs from Chicago and Los Angeles make fast connections at Denver and Kansas City* with dependable Continental service to most of the major markets in the West and Southwest. On Continental you can now have one-carrier service to many new markets in the nation for a wider range of distribution—a tremendous aid to increased sales volume.

Call your nearest airfreight forwarder, or Continental Air Lines, and let them show you haw Air. Freight shipping can work wonders for your business.

Chicago Ludlow 5-6800
Kansas City . . . Grand 1-3703
Denver Dexter 3-1964
Los Angeles Oregon 8-3943

Continental AIR LINES



Chuting the News . .

(Continued from Page 13)

Hoist Manufacturers Assn. Elects Walkley President

Arland R. Walkley, Manning, Maxwell and Moore, Inc., Muskegon, Mich., has been elected president of the newly organized Hoist Manufacturers Association, Inc.

Milton L. Aitken, Robbins and Myers, Inc., was named vice president and Joe H. Peritz was elected executive secretary and treasurer. Directors are Carl O. Hedner, Yale and Towne Manufacturing Company; William C. Miles, American Engineering Company; and William S. Armington, The Euclid Crane and Hoist Company.

Offices of the association are at 1 Thomas Circle, Washington, D. C.

-DA-

The National Small Shipments Traffic Conference Inc. has petitioned the ICC to suspend tariffs published by the Middle Atlantic Conference. These would substantially increase the minimum charges per shipment and affect traffic moving within the Middle Atlantic Territory, between Middle Atlantic and New England Territories, between New York and Philadelphia areas, and within the Philadelphia area.

Receive Safety Award



Over-the-road drivers of Interstate Dispatch, Inc., won the 1956 Presidents Safety Contest given by Transportation Underwriters, Inc., Indianapolis, Ind. Taking part in the presentation were (left to right) M. E. Holt, ID president; John Hutchins, Jr., steward, ID road drivers; Voris Lyons, vice president, Transportation Underwriters, Inc.; and A. C. Hrubes, ID director of safety and insurance

News Briefs

G. B. Davis, director of sales, The Baker-Raulang Co. has been named general chairman for the National Industrial Packaging and Handling Exposition of the Society of Industrial Packaging and Materials Handling Engineers. The show will be held Oct. 28-31 in Atlantic City, N. J.

Three new members have been named to The College-Industry Committee on Material Handling Education of The Material Handling Institute, Inc. They are Prof. Robert M. LaForge, University of Tennessee; Robert W. Wesson, Carbide and Carbon Chemicals Co.; and J. W. Wunsch, of the Silent Hoist and Crane Co.

Four more material handling equipment manufacturers have joined The Material Handling Institute, Inc. New members and their sections are as follows: American Chain and Cable Co., Inc., Electric Hoists; Economy Engineering Co., Powerized Hand Lift Truck; Little Giant Products, Inc., Pallets and Auxiliary Equipment; and the Whiting Corp., Monorail Section.

The Baltimore and Ohio Railroad's piggy-back service has been extended to provide additional coverage of points in Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, Wisconsin, and Wyoming.

Charles Franklin Kettering, former general manager of the General Motors Research Laboratories, will be awarded the Harry E. Salzberg Medal for outstanding achievements in the field of transportation. Kettering will deliver the ninth Memorial Salzberg Lecture at Syracuse University April 2.

—DA—

Freight rate increases for several trade routes have been announced by U.S. and foreign ship lines. Members of the Pacific Coast-Australasian Tariff Bureau will increase rates between Pacific Coast ports and Australia and New Zealand, effective May 1. On the same date, Booth American Shipping Corp. will increase rates to Leticia, Colombia, and Iquitos, Peru. Effective April 1, the U.S. Atlantic and Gulf Santo Domingo Conference raised rates between U. S. Atlantic and Gulf ports and the Dominican Republic.

Club Briefs

The Ohio State Industrial Traffic League held its annual meeting April 4 in Columbus.

Leading industrial men of the community were present March 21 for the Industry Night dinner of the Central Valley Transportation Club, of Modesto, Calif.

The Traffic Club of Eastern Connecticut held its Industry Night March 28 with Walter L. Elwood, Jr., plant superintendent of the Charles Pfizer Co. as speaker.

Los Angeles fire officials demonstrated fire hazards and methods of extinguishing fire on transportation vehicles at a recent meeting of Los Angeles Transportation Club.

Alan Lister, general traffic manager, Terminal Railroad Assn. of St. Louis, spoke on "History and Romance of the TRRA" at a recent luncheon meeting of The Traffic Club of Houston.

Nicholas Fucci, Permacel Tape Corp., was re-elected chairman of the Shippers' Conference of Greater New York at the group's recent annual meeting. Others re-elected were Edward J. Longden, George Helme Co., first vice president; Howard E. Pike, Lily-Tulip Cup Corp., second vice chairman; R. A. Cooke, American Newspapers Publishers Assn., secretary-treasurer.

S. J. Lee, president of Lee Fleet Management, was guest speaker at the March 25 meeting of the Delta Nu Alpha Transportation Fraternity, Newark Chapter. He spoke on equipment leasing.

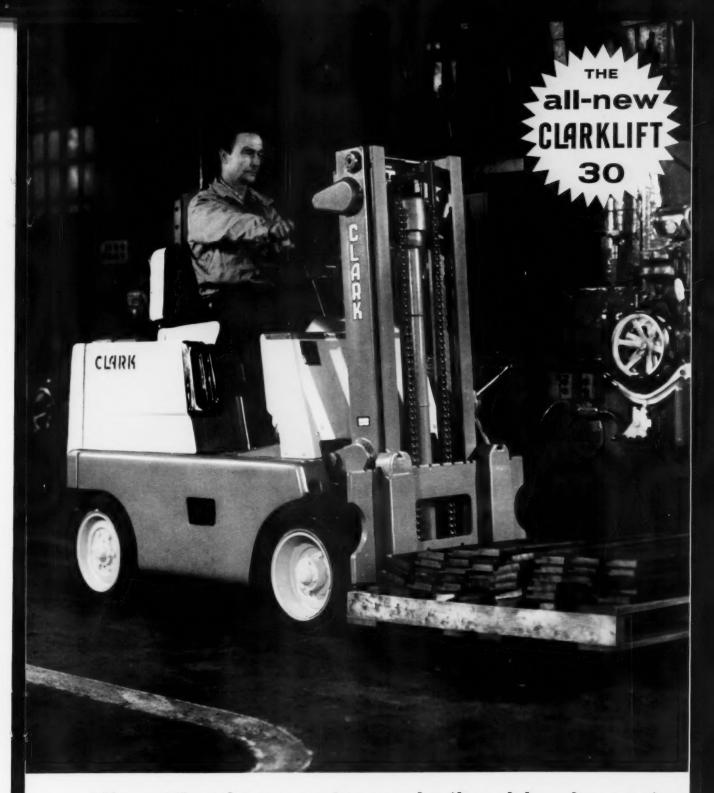
The Northern California Chapter, American Materials Handling Society, had as its guest speaker for the March meeting Ed Beuter, operating manager of Zellerbach Paper Co.

Harry J. Breithaupt, Jr., general attorney of the Assn. of American Railroads, spoke on proposed Federal legislation at a recent meeting of the Wilmington Chapter, Delta Nu Alpha Transportation Fraternity.

Speaking before the Indianapolis Traffic Club, Peter T. Beardsley, director of the Law Dept. of the American Trucking Associations, called the term dynamic competition "modern gobbledegook for a much better understood term 'cutthroat competition.'"

The Foreign Commerce Club, of New York, heard a talk on port development by Albert L. King, director of marine terminals, The Port of New York Authority, at a recent meeting.

Neil J. Curry, chairman of the Executive Committee of the American Trucking Associations, spoke before the Washington, D. C., Chapter of the National Defense Transportation Assn. recently.



His enthusiasm puts you in the driver's seat

We've learned one thing about drivers in the process of building over 250,000 lift trucks. An *enthusiastic* driver can make a good truck *look* good. How do you get an enthusiastic driver? By giving him the new *Clarklift*, a truck he's *sure* to like. It's a combination that you know will result in superior truck performance.

We're sure the new Clarklift is the best performing truck on the market today. We're equally sure of

driver enthusiasm. Thousands of design and test hours stand behind this assurance to you. So when you match his enthusiasm with the finest performance in industrial trucks, it's pretty obvious—you're in the driver's seat too.

Industrial Truck Division Clark Equipment Company Battle Creek, Michigan CLARK'

HARTFORD DESPATCH & WAREHOUSE CO., INC. protects its customers' goods

Automatically...
gets greater security from

FIRE and BURGLARY, and SAVES \$17,500 A YEAR



Cambridge Warehouse, protected by ADT Central Station Sprinkler Supervisory and Waterflow Alarm, and Burglar Alarm Services

Springfield Warehouse, protected by ADT Central Station Sprinkler Supervisory and Waterflow Alarm, Burglar Alarm, and Automatic Heating Supervisory Services



Complete inventory security is our goal...and to attain it we depend on ADT in all of our locations. At Springfield we have relied on ADT Automatic Protection Service for many years. When we opened our Cambridge warehouse in 1955, similar service was a prerequisite. In both buildings we have more complete protection than can be obtained otherwise, and at less expense. We estimate our savings to be \$17,500 a year.

E. G. MOONEY President

Modern warehousing demands modern safeguards against fire, burglary and other hazards. In Southern New England, Hartford Despatch offers its customers the complete security afforded by ADT. The two warehouses depicted here are guarded completely against fire and burglary by combinations of ADT Automatic Protection Services. In Hartford, where personnel are on duty twenty-four hours a day, ADT Manual Fire Alarm Service has been provided and the buildings are patrolled by ADT-supervised watchmen.

Thousands of progressive warehousemen and other business executives join Mr. Mooney and his associates in endorsing the efficiency and economy of complete ADT Automatic Protection because they know that it gives greater security for property, profits, customers' goods, and employees' jobs than other methods...and at lower cost.

May we show you what ADT can do for you?

Whether your premises are old or new, sprinklered or unsprinklered, an ADT specialist will show you how you can save money while getting better protection against fire and burglary automatically. Call our local sales office if we are listed in your phone book; or write to our Executive Office.

Controlled Companies of

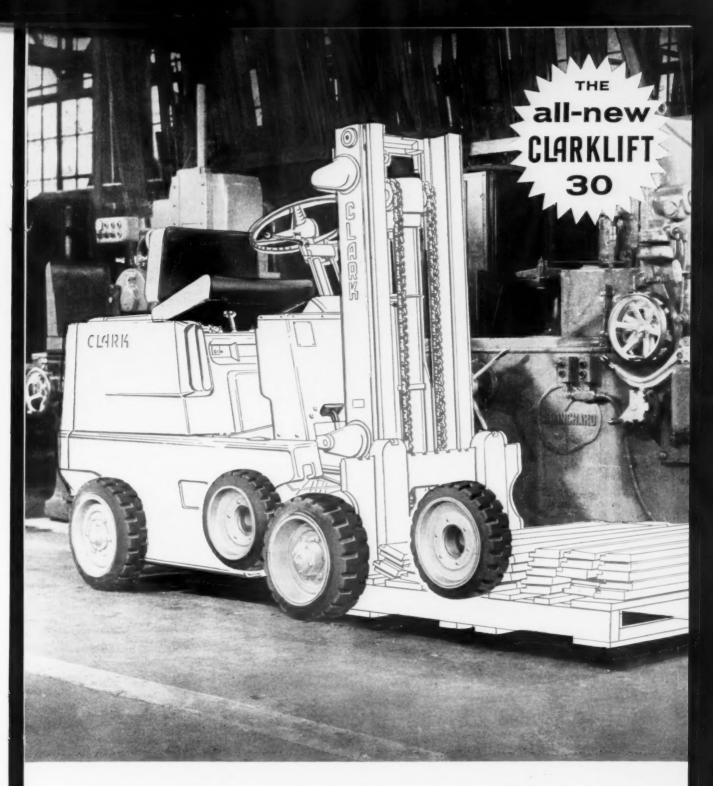


AMERICAN DISTRICT TELEGRAPH COMPANY

EXECUTIVE OFFICE • 155 Sixth Avenue, New York 13, N. Y.

A NATIONWIDE ORGANIZATION

Circle No. 7 on Card, Facing Page 69, for more information



A twin-tired truck prevents one tired driver

Take a look at this new *Clarklift*. Notice the back and front wheels are the same diameter! Your drivers can tell you this permits a much smoother ride for them *and* the load. These big rear wheels won't drop into every little depression in the floor as small wheels do.

On the new *Clarklift*, equal-sized wheels not only smooth out bumps, but take the groan out of steering. One lever on the steering column controls all

lift and tilt action. There's a wide easy-moving brake pedal. No clutch. And when the driver settles down into that roomy, adjustable foam rubber seat, he won't want to leave it. It's no secret . . . he will like the Clarklift and you'll

get more work from it.

qual-sized wheels not only
ake the groan out of steereering column controls all

Circle No. 8 on Card, Facing Page 69, for more information

CLARK® EQUIPMENT

Men in the News

Troffic

Ray H. Wareina—appointed distribution manager, Bakery Products Div., Pillsbury Mills, Inc., Minneapolis.

John A. Breunig-new traffic manager, Central National Corp.



Francis A.
Hartney — appointed traffic manager Goodyear Tire & Rubber Company's Los Angeles plant.

G. J. Claveau—appointed manager of inland freight, Canadian Industries, Ltd., Montreal, Quebec and J. J. Hyland—manager of export and water freight.

Walter C. Brink—new general traffic manager, U. S. Industries, Inc., Chicago.

Eugene Landis—new director of transportation and Walter Knorst named assistant director of transportation, International Minerals & Chemicals Corp., Chicago.

Leon J. Carlsen—promoted to assistant traffic manager, Bedford Park plant, Minnesota Mining & Mfg. Co., St. Paul, Minn.

K. A. Vaughan—promoted to export manager, Industrial Div., Gould-National Batteries, New York.

R. Earl Miller
— new traffic
manager for Bendix Aviation
Corp., Kansas
City Division.



Robert C. Bachelder—new traffic manager, Heekin Can Co., Cincinnati, O.

Colonel Thomas R. Vague — appointed regional director, Southwestern Traffic Region, Military Traffic Management Agency, with headquarters in Dallas, Tex.

Carl Wolza — elected chairman, Traffic Committee, Automobile Mfrs. Assn. Mr. Wolza is general traffic manager, White Motor Co., Cleveland.

Materials Handling

Robert M. Tobin—appointed sales manager, Powrworker Section, Industrial Truck Div., Clark Equipment Co., Battle Creek, Mich.

Kenneth E. Sutton, Jr.—new regional manager of the Eastern District Sales Office, Mercury Mfg. Co.

Edward L. McCabe—promoted to sales manager, Philadelphia branch, Exide Industrial Div., The Electric Storage Battery Co. Francis J. Dunleavy—promoted to assistant general manager, Yale & Towne Mfg. Co., Philadelphia, succeeding John T. McCarley general manager of the new West Coast plant under construction at San Leandro, Calif. S. Wilson Clark, promoted to manager of Export Sales for the New York Div.



Percy L. Douglas (left)—new president, Baker-Raulang Co., Cleveland. He succeeds William A. Bauer (right) who will continue as a member of the Board of Directors.

Karl C. Schmedicke—new manager of manufacturing, Lamson Mobilift Corp., Portland, Ore. J. F. Lanners—promoted to manager, Chicago Div., Gould-National Batteries, Inc.

Philip K. Mc-Cullough — elected executive vicepresident and assistant treasurer, The Mercury Mfg. Co., Chicago.



Robert D. Schwartz—new assistant advertising manager, and Robert L. Knox and Herman R. Brown—assistant sales managers, The Frank G. Hough Co., Libertyville, Ill.

E. Armstrong Damon — appointed advertising manager, Edison Storage Battery Div., Thomas A. Edison, Inc., West Orange, N. J.

Glenn A. Christians—named acting advertising manager of Clark Equipment Company's Industrial Truck Div., Battle Creek, Mich.

W. C. Shea—becomes assistant to vice president for sales; D. F. Adams—appointed sales manager; John M. Spooner—promoted to director of marketing; and S. A. Leone—named manager of special products, in realignment of the sales department of The Colson Corp., Elyria, Ohio.

Coming Events

Apr. 17-18 — Eastern Industrial Traffic League, Semi-Annual Meeting, DuPont Plaza Hotel, Washington, D. C.

Apr. 25-27—California Moving & Stge. Assn., El Mirador Hotel, Palm Springs.

Apr. 26-27—Material Handling Equipment Distributors Assn., Annual Convention Meeting, Chalfonte-Haddon Hall Hotel, Atlantic City, N. J.

Apr. 29-May 3—7th National Materials Handling Exposition & Conference, Convention Hall, Philadelphia.

May 2-3—Fibre Drum Mfrs. Assn., Annual Meeting, Commodore Hotel, New York.

May 5-9—The Operations Council, ATA, Annual Meeting, Hotel Commodore, New York.

May 12-18—National Transportation Week, sponsored by the Associated Traffic Clubs of America.

May 13-16 — Canadian Warehousemen's Assn., 40th Annual Convention, Harrison Hot Springs Hotel, Harrison Hot Springs, British Columbia.

May 15-16—Association of Interstate Commerce Practitioners, National Meeting, Conrad Hilton Hotel, Chicago.

May 16—National Rivers and Harbors Congress, Washington, D. C.

May 16—Hoist Mfrs.' Assn., Inc., Mar flower Hotel, Washington, D. C.

May 17—National Defense Transportation
Day, sponsored by the National Defense
Transportation Assn.

May 20-24—Regular Common Carrier Conference, ATA, San Francisco, Cal. May 22—Freight Loss and Damage Prevention Section, Assn. of American Railroads, Annual Meeting, Chateau Frontenac Hotel, Quebec, Can.

May 22-25—Chain Store Traffic League, Annual Meeting, New Orleans, La.

May 26-30—National Tank Truck Carriers, ATA, Annual Meeting, Sheraton-Cadillac Hotel, Detroit.

May 28—June I—Local Cartage National Conference, Annual Convention, Edgewater Beach Hotel, Chicago.

June 16-29—Material Handling Training Conference, 4th Annual Meeting, Industrial Management Center, Lake Placid, N. Y.

June 17-19—Freight Claim Council of the ATA, Annual Meeting, Hotel Wisconsin, Milwaukee, Wis.

June 19-20—ATA Executive Committee, ATA Headquarters, Washington, D. C.

June 24-26—National Wooden Box Assn. Annual Summer Meeting, Lake Placid Club, Lake Placid, N. Y.

July 15-17—Truck-Trailer Mfrs. Assn., Summer Meeting, Homestead Hotel, Hot Springs, Va.

Shippers Advisory Boards

May 20-21—Central Western, Salt Lake City, Utah.

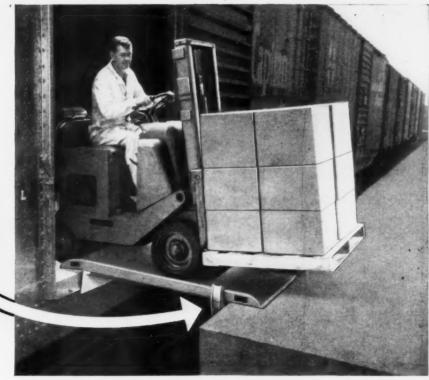
May 21-22-23-Southwest, Amarillo, Texas.

Shipper-Motor Carrier Conference

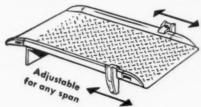
May 14-15 — Middlewest Shipper-Motor Carrier Conference, 18th Regular Meeting, Congress Hotel, Chicago.

NEW





Adjustable SPAN-LOCKS* — an exclusive feature of Magcoa Magnesium Dockboards



- Now you can eliminate all board slippage
- Lock your Dockboard in any desired position
- Use a single Dockboard to do double duty

* Patent Pendina

Now Magcoa has eliminated all board slippage... by developing the revolutionary new Span-Locks. Span-Locks eliminate the need for adjustment pins ... increase efficiency and prolong the life of your board.

Span-Locks permit you to lock your Dockboard in any desired position... even when angle-parking is necessary at your truck dock or when you have a curved-track rail siding. Whether your dock-to-carrier span varies from 3 inches to 63 inches (or more), Span-Locks adjust to your exact needs; to hold the board exactly where you want it.

Now Span-Locks permit you to use a single Dockboard for both truck

loading and rail loading . . . with complete safety and efficiency.

You may even be able to use Span-Locks on your present Dockboard.

Fifteen months of testing on busy customer loading docks have proved that Span-Locks are versatile and rugged.



A new folder shows where and how the new Span-Locks can increase your dock loading efficiency and safety. Send for your free copy today.

MAGNESIUM COMPANY OF AMERICA

MATERIALS HANDLING DIV. EAST CHICAGO 3, INDIANA

Representatives in principal cities

[] m	
Please	send SPAN-LOCK bulletin
Name and	Title
Company_	The state of the s
Address	

Copyright, 1956, Magnesium Company of America

Circle No. 9 on Card, Facing Page 69, for more information

Announcing

effective April 1, 1957

the merging of rights, facilities, equipment and personnel of

SPECTOR

SPECTOR FREIGHT SYSTEM, INC.

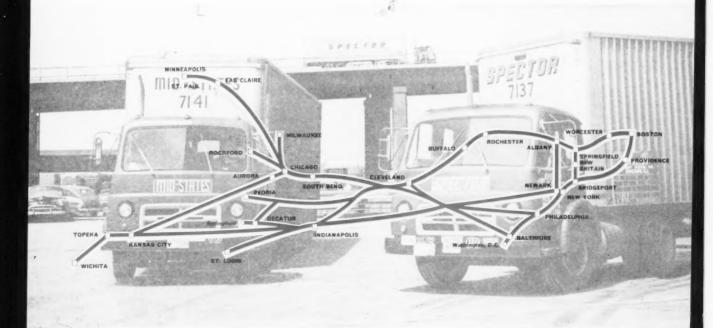
and

MID-STATES

MID-STATES FREIGHT LINES, INC.

into a single motor transportation system

SPECTOR MID-STATES



taking the things of America
where they're needed...
when they're needed...

SPECTOR FREIGHT SYSTEM, INC., CHICAGO 8, TERMINALS IN PRINCIPAL CITIES

Now we are one...

The Spector-Mid-States Merger and Its Meaning to the Progress of Distribution in America



W. STANHAUS President



CECIL VERNON

Executive Vice President

On the Morning of January 17th, Interstate Commerce Commission Secretary Harold D. McCoy put his signature to a document which brings together the men and resources of two of the nation's largest and most respected motor common carriers.

Spector-Mid-States

The merger of Spector Freight System and Mid-States Freight Lines was more than three years in the making. It is the result of a long and searching investigation into the economic climate and future of American industry, into the changing distribution patterns of a dynamic national and world marketplace.

During those months, we talked with traffic managers, with distribution people, with educators, economists, corporation presidents and owners of small businesses everywhere. Their observations and recommendations were, perhaps, among the most important influences in our decision to merge.

American business today is intensely concerned with its distribution practices—and its mounting cost. Of these costs, transportation has become an increasingly significant factor. The transportation company—rail, truck, air or water service alike—whose management fails to recognize the implications of this major industrial problem cannot hope to survive, let alone prosper.

We of Spector—Mid-States acknowledge the changing character and needs of American industry today. Its history—from automobiles to refrigerators, from foodstuffs to chemicals—demonstrates the bounties of mass production and mass distribution. Just as there were economies to be realized in the mass production of automobiles, there are new economies, greater values to be realized in mass transportation.

Spector—Mid-States is founded on the principle that American industry must have a flexible mass transportation service at a price which the mass consumer, directly or indirectly, can afford to pay.

We are further dedicated to a program of expansion and growth based upon the expressed need for the progressive, personalized service of our past, enhanced by the research and development potentials of our future.

There are other significant reasons why we have merged. The well-being of our people and our families is one. It is our deep conviction that only in enlarging the scope of our individual efforts can we most fully broaden the stature and earning opportunities of our combined 3000 employees. Each and every member of the Spector—Mid-States family bears a greater responsibility than he did before. In every instance, our people have and will continue to have priority of opportunity to move up into better or newly created positions as their abilities warrant.

Another reason—our resources. In combining the substantial cash, capital and credit resources of our separate firms, we are able to make major additions and improvements in our terminal facilities and fleet (already in excess of 3500 units). We are able to devote a full complement of our time and money to research and development in all segments of our enterprise. No individual company, without the considerable volume that is being developed through this merger, could hope to provide the required minimum investment in research so necessary to the continuing improvement of our customer service.

Spector-Mid-States

Spector—Mid-States is authorized to serve points in all of the 48 states, with direct service between 15 of America's top 20 industrial and commercial markets. Our more than 15,300 miles of inter- and intra-state highway routes provide a virtual blanket coverage of the North and Central East and Middle America. (It's interesting to note here that, while less than 25 percent of our total tonnages were derived from common sources, 85 percent of our highway

mileages travelled were over common routes. This fact promises an unparalleled opportunity for the maximum utilization of our equipment, particularly of temperature controlled, open-top, flatbed and container units.) Our terminals number 28, are located in: Albany, Aurora, Baltimore-Washington, Boston, Bridgeport, Buffalo, Chicago, Cleveland, Decatur, Eau Claire, Indianapolis, Kansas City, Milwaukee, Minneapolis-St. Paul, Newark, New Britain, New York, Peoria, Philadelphia, Providence, Rochester, Rockford, St. Louis, South Bend, Springfield, Topeka, Wichita, Worcester.

Yes, now we are one . . . and we are proud. Proud and privileged to be a part of an American dream in the making. We are thankful for the opportunity to grow and live in a day and a place where frontiers never cease to beckon.

W. "Stan" Stanhaus, one of the youngest major industrial leaders in America (age 40), joined the Spector organization seventeen years ago. He rose through the ranks from a member of the accounting department to general manager in 1951, was elected to his current position four years later, in 1955. Stanhaus' early education is traditional Americana: he traveled seventy miles daily after a twelve hour night shift in the coal mines of New Baden (Illinois) to attend business school in St. Louis. An authority on freight transportation, he inspired many of the firm's now-accepted innovations. Stanhaus, his wife Mary and their three children live in suburban Glenview, Illinois.

Cecil Vernon, formerly president of Mid-States Freight Lines (since 1944) and now principal operating head of the merged Spector—Mid-States operation is one of the most colorful figures in American transportation. It was principally through his efforts that the Mid-States firm was founded in Kansas City in the mid-thirties and flourished (after his purchase of and amalgamation with the Evans Truck Lines in 1938) into one of the nation's leading common carriers. Vernon, 48, his wife and two children make their home in Hinsdale, Illinois.

COVERAGE



greatest coverage of key cities enables American to serve traffic managers better than any other airline!

To be sure of fast forwarding and dependable on-time deliveries, specify American Airlines Airfreight. Because only American offers direct, one-carrier service to 17 of the top 20 retail markets, 13 of the first 15 wholesale markets, and 18 of the leading 20 manufacturing centers.

AMERICAN AIRLINES AIRFREIGHT

-flies more freight than any other airline in the world

On the Line-



Short Cut to Success

We've had a very refreshing and stimulating experience this day. We listened to what could be called clinical reports of an industry that gave itself a physical examination.

The industry is an important one. Moving and storage. The occasion: The 36th Annual Meeting of the National Furniture Warehousemen's Association, a dynamic factor factotum in the industry.

For some time, NFWA members have been scrutinizing their operations critically. There was good reason. Over the years, for example, business has shown excellent growth, yet profits have declined dangerously.

Further, moving and storage methods developed generations ago seemed satisfactory until recent years, when a few of the industry's smart operators developed better techniques. This sparked a conviction that organized outside technical research, as employed by manufacturing industries, may produce even better techniques.

Finally there was some honest management soul searching. Was this industry, traditionally a family affair from one generation to another, becoming inbred? Suppose the next generation turned to other fields, where would the industry find skilled management? Where, outside the family forum and dinner table discussions, can one acquire the know-how to operate a moving and storage business?

Search for the solution to these and similar problems led to the formation, over a year ago, of NFWA's three-phase "Master Plan" and a Foundation to finance it. First progress reports, brief summaries of which can be found on Page 100, were presented at this meeting.

In addition to hearing and reading the reports, we discussed the program with various NFWA members. As a result, we know that some benefits already are being realized, and that the industry's customers also will profit.

In the past, we have observed similar projects but, mostly, they were unilateral in scope. We know of no other all encompassing, industrywide program as this.

For years, individual companies in other industries made complete checks of their practices, products and markets. They paid off handsomely. Most companies improved the quality of their products and services, developed new products and services, and improved their competitive position. Many, too, have been pulled out of financial straits.

A number of these companies have not confined such checks to their physical assets. They have extended them to key personnel and cover medical, psychological and technical tests.

The results of these studies are so good, we wonder why every company doesn't give them a trial. It could be initiated company wide or be limited to branch plants and departments. In most cases, the cost is relatively small and tax deductible.

In a few weeks or a few months, depending on the size of the project, a complete examination can accomplish what might take years under normal conditions. If there ever was a short cut to success, this is it.



Yakkety Yak

When Smitty came home after taking his annual medical check, his wife asked how he made out.

"The doctor says I've got ulcers," he replied dejectedly.

"Good!" exclaimed his helpmate joyfully. "Just like Mr. Rocks, the bank president, and Mr. Madison, the advertising man. Now that you're a success, we'll have to live up to it—with a bigger car, bigger house, and minks for me."

PROGRESS: "What are you sulking about." asked Pat's wife.

"Oh, this morning the boss called me a dimwit."

"Good! Last week he said you were just a half-wit."

MURDER: At the urging of his wife, Brownie went to see the pres-

ident of his company for advice on achieving success.

The boss gave him the old, tried and true formula. "Get in early. Work hard on the job assigned to you. Do more than is expected of you. Don't hesitate to work overtime. Study hard." And so on.

That night his wife asked how he made out. "He said I should kill myself."



MOVING TIP FOR TRAFFIC MANAGERS:

Mayflower "Tailor-Made" Service Assures Reliable Exhibit Schedules

Tailor-made is right! Mayflower's moving experts study the individual needs of your display . . . work right with the builder, if necessary. They help you plan and synchronize the moving schedule . . . provide "exclusive use" van service, if desired . . . storage and extra help whenever and wherever it's needed.

The Mayflower van operator in charge of your display is scientifically trained in this type of moving . . . his helpers especially briefed on your particular job!

Whether it's a single booth or a whole fair . . . whether it's one stop or ten . . . move it by Mayflower. You'll sleep better at night!

AERO MAYFLOWER TRANSIT COMPANY, INC. - INDIANAPOLIS



America's finest long-distance moving service

LETTERS

TO THE EDITOR

Railroad Responsibility

To the Editor:

What liability does a railroad have when it fails to provide cars for loading on the data requested?

ing on the date requested?

We make outbound shipments on our customer's shipping dates. When we order a car two or three days in advance, and the car is not provided until 4:00 to 4:30 in the afternoon, it costs us overtime pay for several man-hours. Of course, we have no control over this expense. To keep our customer satisfied and his shipment on schedule, we are forced to perform this load-out on overtime.

Also, what liability does the railroad have when cars are set opposite the unloading placavd? We have received approximately 350 cars with unloading placards applied and they are completely ignored. Unloading these cars opposite as placarded costs us \$8 to \$10 per car. The railroad will switch the cars and usually it is the next day before they are reset, but they charge us constructive placement the next day when our dock is full. It isn't our fault that these cars were set wrong or when the switching caused bunching.

Also, what liability does the railroad have on bunching under an average agreement. We have an eightcar siding. Assuming we get five cars each day for three days and none are set until the third day when eight cars are set, immediately we are charged constructive placement. This is again beyond our control. What protects a consignee from having the railroad bunch under an average agreement 50 cars, and the consignee having only a five car spot, from being charged constructive placement on the 45 cars remaining until they are unloaded?

Loren M. Stout Assistant General Manager General Warehouse Corp. Springfield, Mo.

Obviously the contents of a contract you may have with the railway company has an important effect upon its legal liability for failure to setting cars at any particular location, for your convenience and elimination of additional expenses for you. This same is true with respect to bunching of cars. And, again, the laws of your particular state, and whether shipment is interstate or intrastate may have some bearing.

When reviewing late and leading higher court decisions, I shall endeavor to locate one or more new cases to the points of your legal problem, and I shall publish the same at the earliest possible date.—Leo T. Parker, DA Legal Consultant.

Digest of Opinions

From time to time I have noticed digests of legal opinions in DISTRI-BUTION AGE with reference to liability of warehousemen for loss sustained by customers growing out of theft or other damage to merchandise stored on the warehouse premises.

If you have a collection of opinions from cases dealing with the liability of a warehouseman for loss sustained by customer when stored merchandise was stolen by burglars, and the effect of a limitation of liability clause in a warehouse receipt on the warehouseman's liability in respect to such loss, I would greatly appreciate your sending such to me. .

Joseph L. Jacobs Vice President

Jacobs Warehouse Co., Inc. Kansas City 1, Mo.

After spending a great deal of time After spending a great deal of time to locate the higher court decisions you desire, I cite hereafter several to the point leading decisions. By reference to Shepperd's guide you can "run down" very readily all higher court decisions up to November 1956. in which you are especially interested and which upheld the hereinafter citations. By this plan you will have at hand a multitude of higher court decisions dealing with the liability of a warehouseman for loss sustained by customers when stored merchandise was stolen by burglars, and the effect of a limitation liability clause in a warehouse receipt on the warehouseman's liability in respect to such loss. See following cases: 59 Pac. (2d)

See following cases: 59 Pac. (2d) 299; 294 Pac. 436; 51 Fed. Rep. 439; 62 S. W. (2d) 87; 160 S. W. (2d) 529; 142 S. E. 463; 115 Pac. (2d) 251; 264 Pac. (2d) 534; 167 S. E. 74; 31 N. E. (2d) 285; 9 Atl. (2d) 151; 16 N.Y.S. (2d) 906; 109 Fed. Rep. (2d) 956; 123 So. 90; 124 So. 712; 235 N. W. 521; 61 Pac. (2d) 510; 191 S. E. 813; 177 So. 79; and 111 S. W. (2d) 867.—Leo T. Parker, DA Legal Consultant.

Quick Calculator

To The Editor:

If agreeable we should like to re-produce and use in a Government publication a chart from your January 1957 issue of DISTRIBUTION AGE. This chart, which is for figuring the number of bushels of grain in a cylin-

derical tank, appears on page 70.

We would like to use the chart in a publication on "Aeration of Grain

in Commercial Storages."

Leon E. Holman
Agricultural Engineer
Transportation and Facilities Branch
U. S. Department of Agriculture

Availability of the booklet referred Availability of the booklet referred to by Mr. Holman will be announced in DA upon publication. Because of varying legal obligations to authors, requests for reproduction privileges on material appearing in DA must be handled on an individual basis.—The Editor.

Letters for publication in DISTRI-BUTION AGE must be signed and must give the writer's title and company affiliation. Names will be withheld upon request.





BALTIMORE & OHIO RAILROAD

vour customers! Ask our man!

is interrupted. Try this new right arm to reach

Constantly doing things-better!



FIT FOR A KING...But Your Caravans Do A Better Job!

Camel caravans still operate in certain parts of the globe (and for some pretty important consumers), but if you had to depend on this form of transportation, you'd have to give up most of the luxuries and some of the necessities you now take for granted . . . The high standard of living we enjoy in this country has resulted largely from our development of mass production methods in manufacturing and distribution. And these big-volume methods have been made possible by motor transport ... The motor truck, with its speed and flexibility, has literally become a part of the assembly line — delivering raw materials and parts at one end and moving out finished products from the other. Because of trucks, plants and mills can be located anywhere there are roads - people can live and shop wherever they please . . . Your caravans — the 10 million trucks which serve America - haul more than 3 times the tons moved by all the other transport systems combined! And because of them your life is richer.





AMERICAN TRUCKING INDUSTRY

American Trucking Associations, Inc., Washington 6, D. C.

THE SHORTEST DISTANCE BETWEEN TWO POINTS IS A



LINE



Reduce Installation costs frame with

Dexion Slotted Angle

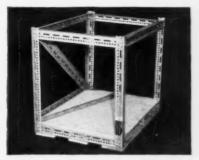
For all installation needs, Acme Steel Dexion Slotted Angle has proved to be the fastest, most convenient framing material available. Dexion Slotted Angle assembles rapidly, easily and always has a slot or hole available for bolts or studs, even for the multiple mounting of components such as those with electrical installations. You can save hours on one installation!

Acme Steel Dexion projects are started and completed—measured, cut and bolted—right at the job site. Embossings spaced every 3 inches simplify measuring, a portable Dexion Cutter shears squarely and cleanly with a single stroke and one wrench tightens all bolts to make strong, permanent frames for any purpose. No drilling or welding, ever.

Cold rolled, galvanized steel Dexion Slotted Angle supports many hundreds of pounds; is available in regular or heavy-duty gauge. Acme Steel Dexion Slotted Angle comes in 10 or 12-foot lengths, ten to a package, with 75 nuts and bolts included. For better Ideas using the simplicity and usefulness of Dexion, write for a free copy of the "Dexion Construction Guide" to Dept. DBD-47, Acme Steel Company, Chicago 27, Illinois.



Dexion Slotted Angle frames and supports conveyorized assembly tables.



Dexion Slotted Angle frames box



DEXION SLOTTED ANGLE

Circle No. 10 on Card, Facing Page 69, for more information

now this is Visibility



...with MONOMAST® UPRIGHT ...available only on HYSTER TRUCKS



HYSTER MONOMAST UPRIGHT
The greatest basic lift truck advance in 25 years

A lift truck operator has to see what he is doing to work efficiently. The better he can see, the more work he

can do in a day.

With the "Monomast" Upright, the operator always has full view of the forks and load. Safety and maneuverability are greatly increased. Operator fatigue is reduced.

erator fatigue is reduced.

"Monomast" panoramic visibility
means faster approach, more accurate
placing of loads, less package damage—far more tons moved per hour.

Ask your Hyster Dealer today for full information, or a demonstration.

Available on All Hyster® Lift Trucks Through 4000 Lbs. Capacity





2940 N. E. Clackamas ... Portland 8, Ore. 1040 Myers St. Danville, Illinois Hyster N.V. . Nijmegen, The Netherlands

FACTORIES: Portland, Oregon; Danville, Illinois; Peoria, Illinois; Nijmegen, The Netherlands

WASHINGTON



By Ray M. Stroupe, Chilton Washington News Bureau

AIR CARGOES CLIMB—Air cargo shipments are pointed toward higher altitudes. From a 1956 level of 380 million ton-miles, predicts the CAA, air freight will rise to 600 million in 1960. Five years later, air haulage is to reach the one-billion ton-mile mark. In 1970, it will amount to 1.6 billion ton-miles. CAA believes a big factor in this growth will be improved package handling.

COMPETE, SAYS IKE—Eisenhower Administration support is given now to a wider range of carrier competition. New version of the Administration transport policy bill calls for full competition between modes and "among carriers of each mode." This means shippers could see more competition between rail lines, for example, or between truckers. National Industrial Traffic League favors this policy as a benefit to shippers.

NEW ICC BUREAU FORMED—Motor carrier operating rights cases before the ICC are handled by a new bureau. It's the Bureau of Operating Rights, successor to the Section of Operating Rights in the Bureau of Motor Carriers. In another change, formal motor carrier finance cases are transferred from the Bureau of Motor Carriers to the Bureau of Finance. ICC expects the altered setup to produce a faster flow of work.

PREPACK USE WIDENS—Prepacking is a thriving practice in fruit and vegetable distribution. A U. S. Agriculture Dept. study in the Northeast discloses that about one-fifth of these foods delivered to retailers are put in ready-for-thecustomer packets. The proportion continues to climb. Automatic machines handle most of the prepackaging of certain root-type vegetables. These include radishes, onions, turnips, and beets.

ASK PENALTY FEES—Penalty per diem fees should be levied by the ICC to combat freight car shortages, the agency argues. Unless such fees can be imposed, the ICC asserts to Congress, there is no way to insure prompt car movement by the railroads. ICC officials believe that the threat of penalty charges would lead to more capable use of existing cars and inspire the roads to build and own more cars.

GIVE UP ON PICKUP—Free pickup and delivery of lcl freight for rail shippers is too expensive. That's the contention of the Chicago and North Western Ry. In March, the ICC was studying a projected C&NW move to cancel this service. Estimated cost to the rail line for free pickup and delivery in 1956 was \$1.5 million. ICC was expected to agree to a new tariff that would do away with the service.

WANT CIVILIAN HELP—Faster unloading of ship cargoes is aimed for by the military forces. They want better ways to discharge supplies at dockside or over-the-beach. Also sought is a new traction system for land vehicles. Tank-type trucks have proved unsatisfactory on paved roads. Anyone with good ideas for meeting these needs should pass them along to the National Inventors Council, U. S. Commerce Dept., Washington 25.

BOYCOTT PLAGUE HIT—Secondary boycotts in the trucking and construction fields may decrease. This change would help highway builders particularly. Some unions have used boycotts to prevent government agencies and local contractors from doing business. National Labor Relations Board now decides federal, state, and local government units are entitled to Taft-Hartley Law protection from the boycotts.

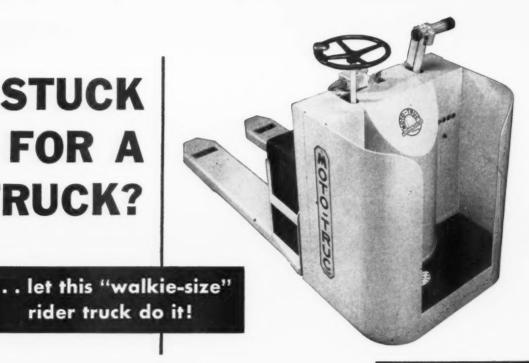
COURT UPHOLDS ICC—Higher rail refrigeration fees allowed by the ICC in 1956 have passed the highest U. S. court test. The Supreme Court endorses a Florida district court action dismissing a suit to set aside the ICC order. Citrus growers' groups brought the suit, questioning ICC authority to permit a 15 per cent boost in charges. In turning down the suit, the lower court held that it had found no issue to rule on.

SEEK TERMINAL WORK—Commercial marine terminal services carry the endorsement of two West Coast congressmen. Both Sen. Magnuson, D., Wash., and Rep. Miller, D., Calif., sponsor bills to channel more government-type cargoes through the terminals. The lawmakers note that a large percentage of such freight is handled by military terminals. Their measures are designed to put more nonclassified government freight in private hands.

SAND HAULERS RATED—Trucks held their lead in hauling of U. S. sand and gravel in 1955. Newly-revealed Bureau of Mines figures identify the trucks' portion of the movements as 77 per cent. This was the same as in 1954. Both commercial and government-and-contractor operations were taken into account. Rail movement of sand and gravel remained at 14 per cent in 1955. Waterways' share dropped from 5 per cent in 1954 to 4 per cent in 1955.

SAFETY DRIVE OPENS—Organized truckers are conducting a drive toward greater night-time safety on the roads. More than half of the worst highway accidents occur at night, the ATA finds. Reflector decals are being fitted on trucks to cut down chances of rear-end collisions.

STUCK FOR A **TRUCK?**



If you are stuck with one of those in-between jobs that demands a small rider type truck for pallet handling, MOTO-TRUC's "Ride-A-Man" pallet trucks are the answer.

"Ride-A-Man" trucks give you all the convenience, safety and ruggedness of much larger rider trucks without sacrificing the compactness and maneuverability of a walkie.

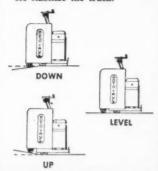
Only slightly larger than a walkie, "Ride-A-Man" trucks provide a roomy operator compartment fully equipped with effortless wheel steering, foot brake and dead-man control. Electric power assures low operating and maintenance costs.



Write for Bulletin 56R. Get full details on the complete line of "Ride-A-Man" trucks.

EXCLUSIVE "FREE FLOATING" ACTION

The sketches show how Moto-Truc's exclusive "free floating" action prevents pitch and roll caused by uneven floors and high speed turns. The wide spread caster wheels stabilize the truck. The operator's compartment floats up and down to keep both casters and drive wheel in constant contact with the floor. The drive wheel carries the load while the casters stabilize the truck.



Largest exclusive manufacturers of "Walkies" and Ride-A-Man Trucks

1956 E. 59th St. Cleveland 3, Ohio

Representatives in Principal Cities

Pallet . . . Platform . . . Hi-Lift Truck

Let's Talk About Perfect Shipping

Every year all the parties concerned with the problem get together and name April "Perfect Shipping Month." It's a good thing in my book because it focuses the attention of shippers, receivers and transportation companies on the prevention of loss and damage.

That's fine—provided we all keep in mind the fact that we can't reach the goal of perfect shipping in one month. And that we won't even come close unless we keep doggedly after it every day of the year.

It Takes Two to Tango

Traffic men are a reasonable lot. I'm sure they'll agree that a railroad can't do it alone. But let's look first at what The Milwaukee Road can do.

There are the things that every good railroad ought to do. Such as provide the right kinds of cars in good condition . . maintain a smooth, safe roadbed . . . handle trains carefully.

roadbed . . . handle trains carefully. Then there are the extra things that an up-and-at-'em, determined-to please railroad offers—and I'll just name a few. Three fully automatic yards where cars are handled as gently as a babe in arms. 100% diesel and electric power that assures smoother starting and stopping as well as more dependable performance. And finally, a team of experts who are always on call to study every detail of your shipping procedures and problems. If necessary, they'll follow a consignment right from your shipping room to the unloading dock of your customer to determine the source of trouble.



Where You Come In

Lots of folks have lectured on the shippers' responsibility. I know you want to cooperate, so I'll keep it real short. Package it right. Mark it legibly. Load it right. Use the right bracing or dunnage. Unload clean. That just about covers it.

But I'd like to add one other suggestion. Ship via The Milwaukee Road for extra assurance of safe, on-time delivery.

We Hate Loss and Damage

These villains cost us money. What is even worse, they cost us friends. And there's nothing more important to us than keeping our friends.

This year let's give Johnny Careful more than a flip salute and an April Fool greeting. Let's work right along with that cheerful little man—listen carefully to his wise admonitions—and see just how much closer we can get to the goal of perfect shipping.

At this end, we're waving the caution signal at every last man concerned with the handling of freight.

Yours for Perfect Shipping,

The Expediter



You can hear the pulse of progress...

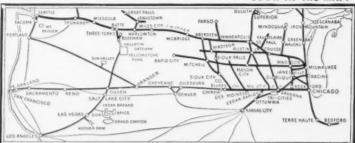
The quickening hum in a steel rail as a train approaches is one of the few things still unchanged on The Milwaukee Road.

Steam has been supplanted by diesel and electric power. The passenger cars are sleeker, quieter and more luxurious—many of them with glass domes for viewing the scenery. The freight yard swarming with men has become

an electronic marvel of automation. The click of the telegraph key has been replaced by radio or voice and printer circuits.

Yes, things are different on The Milwaukee Road. How different you will know only after you have traveled on one of the Super Dome HIAWATHAS or Western "CITIES" Streamliners—or made a shipment via our lines.

LOOK AT THE MAP!



The Milwaukee Road

L. V. Anderson
Assistant to Vice-President

J. M. Cunningham General Freight Traffic Manager

For long-distance moving



It's good to remember that GREYVAN means reliable GREYHOUND service!

You Have undoubtedly discovered that *people* are the biggest part of the moving problem. People who are sincerely and understandably concerned about their household treasures.

As Part of Greyhound Lines, GREYVAN has been dealing with *people* for a long, long time. We understand them. And we understand the problems of Traffic and Personnel Management, too. We know the importance—to you and to us—of *performing* what we promise to your people. Courteous and convenient service—swift, sure and safe—in packing, hauling, storing and unpacking. That's why more and more Traffic Managers advise—give it to GREYVAN... to be *sure!*

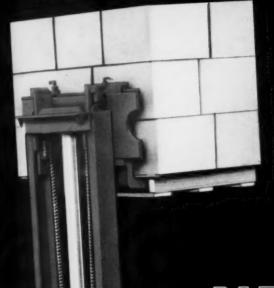


GREYVAN LINES

INCORPORATED

General Office: 57 West Grand Avenue, Chicago 10

THE GREVHOUND MOVERS



MERCURY

MERCURY

GAS FORK TRUCKS

MODEL 430-G - Capacity 4000 lbs.
MODEL 630-G - Capacity 6000 lbs.

Long acknowledged as the builder of the finest electric trucks, MERCURY engineers have now incorporated all of the important and time proved features of these trucks into the new gas powered models. Special attention has been given to increased mechanical stamina, greater operator comfort and top service accessibility—plus many more features that will help you lower the cost of moving materials.

BEFORE YOU SPECIFY . . . be sure to investigate the new MERCURY gas fork trucks.

LP GAS EQUIPMENT . . . AND AUTOMATIC TRANSMISSION OPTIONAL

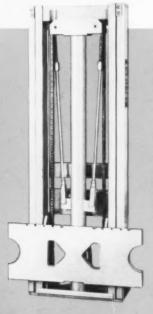
SEE REVERSE SIDE FOR FEATURE DETAILS . . .

MERCURY

GASOLINE FORK TRUCK FEATURES

Here are just a few of the features that will make the new MERCURY ags fork truck the "Standard of Comparison" when evaluating truck performance. construction and maintenance.





DUOSCOPIC MAST ASSEMBLY

Mercury's patented "Balanced Lifting Element Suspension". Two-to-one lift ratio, TRI-SCOPIC most (three-to-one ratio) for greater free-lift is optional. Eccentrically adjustable rollers. Overload relief valve and flow control valve to requlate lowering speed. Simple, single acting low-pressure lift cylinder.

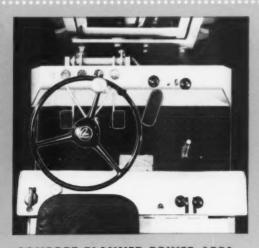


One pivotally mounted double-acting tilt cylinder.



DRIVE ASSEMBLY

Double reduction, spiral-bevel and spur gearing. Full-floating drive shafts. Heavy-duty hydraulic brakes within wheels, Pinion shaft mounted parking brake. Demountable wheel rim and tire assembly. Two speeds forward, two reverse, 11" single disc dry plate clutch.



COMFORT PLANNED DRIVER AREA

- Full view water-proof instrument panel.
- Finger-tip controls.
- Suspended clutch and brake pedals.

CITY

- Unobstructed access to driving area from either side.
- Hand parking brake.
- Excellent visibility.

EASY ACCESSIBILITY TO ALL PARTS



Cover is hinged; seat and side plates removed in seconds. All critical parts exposed for easy servicing. One piece streamlined, functional counterweight. Built in towing hitch.



Complete access to clutch and transmission through removal of two cover plates. Clutch replaceable in 30 minutes—no dismantling of engine or drive.

SMOOTH SHOCK-FREE STEERING

Pivotally-mounted controlled castor trail axle eliminates road shock and kickback—compensates for uneven road surfaces. Engineered for precision steering, easy maneuverability and greater operator comfort.



on display . BOOTH 218-NATIONAL MATERIALS HANDLING EXPOSITION PHILADELPHIA, April 29th . May 3rd

MERCURY MANUFACTURING COMPANY 4104 South Halsted Street, Chicago, Illinois

Please send complete details on Mercury new gas fork trucks

COMPANY ADDRESS STATE CHAMBERS of commerce in many communities perform important and valuable traffic management functions for their members. A few years ago the Transportation and Communication Department of the United States Chamber of Commerce reported that approximately 300 local chambers carried on transportation activities. This figure

The basis for all chamber of commerce traffic and transportation activity is the transportation committee in each organization. These committees vary in size, functions, and importance with the size of the community, the number of members in the chamber, the number of industries, and the location and special problems of the community.

is estimated at 500 today.

Although one will find a considerable similarity in their transportation activities among chambers in the same population group, size is not always the controlling factor. Type of community and location are also important. For example, a chamber located near state lines and rate-territory-border points in a town doing a diversified business, especially if these industries are small, generally profits more from a traffic bureau or similar chamber activity than a larger point located near the center of a rate territory. This is especially so if the industries of the larger community can protect themselves and their markets through their own traffic depart-

Another important factor is the size of the territory to be served by a community. One that produces for or serves a large area is more dependent on transportation. It can be served better by a chamber traffic department than can a city producing for or serving a small area.

Three Plans

One of three plans is usually followed by chambers of commerce in rendering traffic management and allied transportation services:

1. The chamber handles only the



Chambers of Commerce in Traffic Management

Size of organization, type of community, and location determine extent of transportation activities carried on by local C of C groups

general work of the membership at large, accommodating individual members with special services infrequently and without extra charge.

2. The chamber maintains a separate transportation department. This handles much detail work for individuals, at their request, but at no extra charge unless a considerable expense is involved.

3. The chamber offers the services of what is generally called a "transportation bureau" to members without traffic departments of their own. Such services might include traffic matters such as rate determination, routing, auditing freight bills, tracing, expediting and claim preparation. Such a bureau becomes, in effect, an individual traffic department for those members using its services. A charge based on the amount of service rendered each month is made to users.

These larger chambers of commerce, in addition to their traffic bureaus, always carry on general industry or community transportation activities through the appropriate committees, a full-time transportation "commissioner," or some other official.

Smaller towns (less than 25,000 population) usually confine transportation activities to volunteer committee work. Committees function only when special developments require attention. Many of the smaller local chambers, when near large cities, look to those more adequately staffed organizations for aid in traffic matters since their interests, particularly as to freight rates, are tied in with their larger neighbors.

The availability of traffic bureau services increases as population reaches 50,000. Separately financed and operated bureaus to serve individual members are preferred over chamber-operated services because of problems of financial support. However, as one considers communities between 50,000 and 100,000 many chambers are found rendering individual traffic management services under the direction of a full-time department manager financed from the regular chamber budget.

In cities with a population between 100,000 and 200,000 one (Please Turn to Page 84)

Terminal Modernization Raises Efficiency

New truck line headquarters is serving as testing ground for innovations at other terminals. A truck-drag system saves 30 per cent in cost of freight handling while considerably reducing os&d's and work in processing them

By J. F. Smalley

President
Central Truck Lines Inc.
Tampa, Fla.

E FFICIENCY and safety have been improved by Central Truck Lines, Inc., since it started operating out of its new headquarters facilities at Tampa, Fla.

Consisting of a new terminal and maintenance shop and a remodeled office building in the downtown section, the headquarters is serving as a testing ground for innovations at other company terminals.

Drag System

Operation of a truck-drag system at Tampa was so successful that one will be placed in each terminal where the amount of freight justifies it. Atlanta, New Orleans, Miami and Jacksonville are the first terminals to receive this improvement.

The company credits the drag system at Tampa with a saving of about 30 per cent in cost of freight handling. In addition, it has considerably reduced os&d's and work involved in processing them.



Leased wire service is installed in glassenclosed area at back of reception room

The terminal measures 72 x 300 ft, not including an office 60 x 60 ft. It has 45 berths for trucks on two sides and one end. The building is served by a pneumatic tube conveyor for handling bills quickly. The conveyor is made up of 2874 ft of tube. Time saved by the system has led to its consideration for other terminals.

Office Remodeled

As part of the building program at the general headquarters, Central completely remodeled the downtown office to provide more office space. Air conditioning and soundproofing give working comfort.

A feature of the building is a

Western Union leased wire service installed in a glass-enclosed room at the rear of the reception room. Visitors waiting in the reception room can see how dispatches that control the operation of the company's fleet are handled.

There are connections with 29 terminals. About 2500 messages are handled daily. This system is seen by company officials as a factor in cutting down lost time for trucks and trailers.

Truck Radio

Two-way radio, recently installed on all local pickup trucks on a new low-band frequency, also has been a time and money saver. Seven trucks now do the work of eight. It keeps trucks from backtracking, gives shippers quicker pickups and enables the company to keep better track of its equipment. In centers where cities are close together, as in the Tampa area, it enables the company to give better service to several areas than could be done through terminal operations. For example, from Tampa the cities of St. Petersburg, Clearwater and Tarpon Springs are served by pickups instead of by separate terminals.

Preventive maintenance has enabled the company to win several

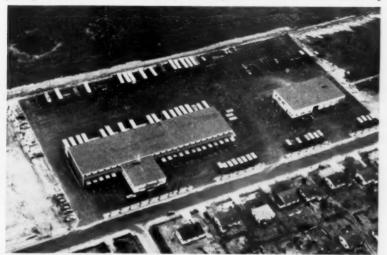


A dispatcher operates truck lines' radio-control pickup out of the Tampa terminal. Over 2500 ft of pneumatic tube conveyor is used at Tampa to handle bills quickly



Central completely remodeled the downtown office to provide additional office space. Features of structure are air conditioning, soundproofing, and wire center

Aerial view shows new terminal measuring 72×300 ft with a 60×60 ft office projecting from the front. The building at the right is a Central maintenance shop



of the American Trucking Associations awards for safety. The preventive maintenance program is carried out primarily with facilities at Atlanta, Jacksonville, Orlando, Miami, Tampa and Mobile. Major overhauls are handled in Tampa.

Cut Downtime

Concentration of major maintenance in Tampa has resulted in a reduction in downtime for equipment undergoing major repairs. The Tampa shop-72 by 150 ft, with three bays-can handle eight tractors at a time. Under this system there is no lost time waiting for repairs. About a third of the company's equipment gets to Tampa on regularly scheduled runs. Other units, which operate regularly in the remainder of the company's territory, are transferred to the Tampa run if it is time for them to come in for a major overhaul.

Preventive Maintenance

In the preventive maintenance program all tractors are checked daily. Drivers are required to turn in a written report at the end of every run covering even the slightest thing that appears to be wrong, such as "check the front end, something seems to be loose." It is by paying close attention to even the minutest details that Central has maintained a good safety record and kept its equipment rolling.

Accident Frequency

During the calendar year 1955, the company's trucks traveled 18,-683,081 miles with an accident frequency rate average for over-theroad and local trucks of .74 per 100,000 miles. There were 136 traffic accidents and 3 non-traffic accidents in that period, with city driving contributing 77; a frequency rate of 3.53 per 100,000 miles as against 62 over-the-road accidents, with a frequency rate of only .38 per 100,000 miles.

The low accident rate is due partly to the incentive plan in which free vacations for the family are awarded to accident-free drivers at the company retreat at Homasassa Springs.

"Model" Training Program

Navy's loss and damage prevention seminar features the use of scale model rail cars and trucks to demonstrate loading and bracing methods

A "MODEL" training program developed by the United States Navy has produced startling results in the field of freight loss and damage prevention.

The word "model," as used here, is given double meaning. First, it refers to the overall efficiency of the program. Second, it describes the use of scale model freight cars and truck trailers to demonstrate loading and bracing techniques.

The scale models illustrated on these pages are incorporated in a loading test kit. The kit, with other visual aids such as movies and projection slides, permits Bureau instructors to simulate onthe-job conditions.

In 1952, when the loss and damage prevention program was initiated, damaged and improper shipments averaged 10,000 a year. By 1956 this figure had been reduced to 931. The program also is credited with a general improvement in loading methods, a speedup in loading time, and a reduction in labor and material costs.

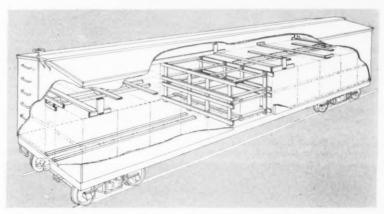
Seminars

Backbone of the program is a series of loss and damage prevention seminars developed by the Navy's Bureau of Ordnance and Bureau of Supplies and Accounts. Twenty-nine such seminars have been conducted, with more than 3000 Navy, Army, Air Force, Marine, and contract representatives participating.

The seminars are used to instruct personnel in how to properly load, prepare, and document a shipment in order to minimize damage in transit. They also em-



Model freight car and truck-trailer with model loads. Scale models were designed and built by Container Laboratories, Inc., of Washington, D. C.



Line drawings formerly used were expensive to prepare and difficult to interpret. Models permit more graphic display of loading deficiencies

phasize legal and technical freight claims requirements, and demonstrate how to detect loss and damage and establish carrier or shipper liability.

A typical four-day session covers the following subjects:

1. Introduction to Navy transportation.

2. Loss and damage film.

3. General carloading rules and equipment.

4. Closed carloading methods.

5. Inspection and receipt of materials.

6. The Navy Shipping Guide.

7. Clearances on wide and high items.

8. Claim prevention.

9. Pneumatic dunnage.

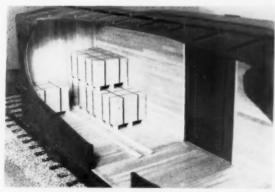
Reduces Damages 90.7%

By Albert Fernandes

Transportation Consultant
Bureau of Ordnance, United States Navy

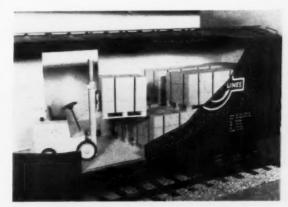
About the Author

In his 17 years with the Navy, Mr. Fernandes has won many honors. A Distinguished Civilian Service Medal cited him for "saving the Navy millions of dollars in transportation costs." He also received the Bureau's first Civilian Efficiency Award for "saving the Navy \$5 million in freight costs."

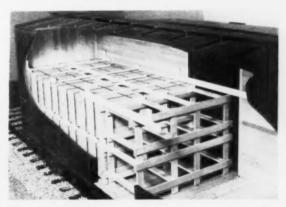


Model loads are built step by step, and each step is photographed. Here palletized containers are loaded in rail car

- 10. Mixed loads in closed cars.
- 11. Cable reel shipments in closed cars.
- 12. Palletized loads in closed cars.
- 13. Cylindrical type containers.
- 14. Loading and securing various bagged items.
- 15. Preparing and loading machinery.
- 16. Bonded block loading.
- 17. Loading open-top cars.
- 18. Introduction to ordnance shipments.
 (Please Turn Page)



Scale models of handling equipment, such as the fork truck shown here, are used to demonstrate loading



Model blocking and bracing is used to demonstrate the proper method of securing the load for rail shipment

The models are constructed so that the completed load can be lifted out of carrier vehicle and photographed

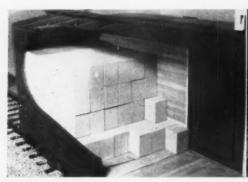


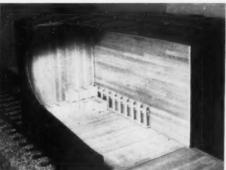




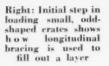
Left: The initial step in building a load that is to be bound with paper liner is demonstrated with scale models

Right: Second stage of wrap-around load is completed, demonstrating how liner offers product protection in transit

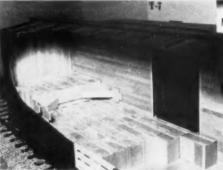




Left: Wrap-around load is completed. Next step is to lift out the entire load and photograph it from all angles







Left: Similar load showing how transverse bracing is used in the end of a car to prevent load from shifting while in transit

Right: Completed load, Model bracing is used to show carpenters how full-size blocking and bracing should be built

Model Training Program . . .

(Continued from Preceding Page)

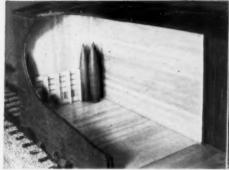
- Federal regulations on explosives and other dangerous articles.
 - 20. Ammunition handling-film.
- 21. Ordnance shipping handbook.
- 22. Explosives drivers' hand-book.
 - 23. Vehicle inspection.
- 24. Damaged shipments of explosives—slides.
- 25. Guided missiles, basic propellants.

- 26. Freight car utility loaders.
- 27. Inspection and certification of rail cars.
 - 28. Freight classification.
- 29. Traffic responsibilities of inspectors.
- 30. Practical carloading demonstrations and impact tests.
- 31. Field trip, including tour of Navy and contractor facilities.

A separate annual seminar has been conducted on the shipment of explosives and other dangerous articles. This seminar is attended by representatives from all branches of the service, the Interstate Commerce Commission, the Munitions Carriers Conference of the ATA, Railway Express, and others involved with the movement of explosive goods. The Navy's perfect record in shipping explosives is attributed partly to these seminars.

Scale Models

The Bureau of Ordnance feels that the scale model approach shows real promise in further reducing loss and damage. In addition to their use as a part of the

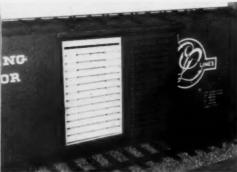




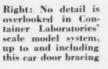
Left: End bracing is used to protect shells from damage and/or possible explosion Odd shapes create a special problem.

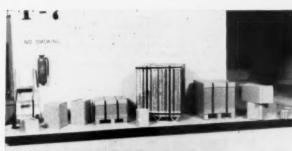
Right: Completed load of shells with bracing. Navy credits perfect explosives shipping record to the seminar program

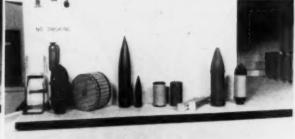




Left: This particular type of explosive is protected against damage and explosion by specially constructed bomb cradles or racks







Model kits include 10 different type cartons and crates, including three unit-load packs with pallet-type bases

Odd shapes and sizes, including shells, bombs, and missiles, are treated by the Navy in a special seminar

training program, the scale models can be used to solve particular loading problems. They are adaptable for similar use by common, contract, and private carriers, warehousemen, shippers and others concerned with freight transportation.

Like a three-dimensional jigsaw puzzle, an entire load of model containers can be re-arranged to show improvements in load distribution and spacing. Deficiencies which cannot be pin-pointed on a drawing can be brought home with force with the models.

Present carloading instructions are limited in their effectiveness.

Often the line drawings used can not be fully understood or interpreted by those for whom the instructions are intended. Scale models have eliminated this problem. In addition, once a problem has been solved through use of the models, a photograph is taken and reproduced at a fraction of the cost of line drawings.

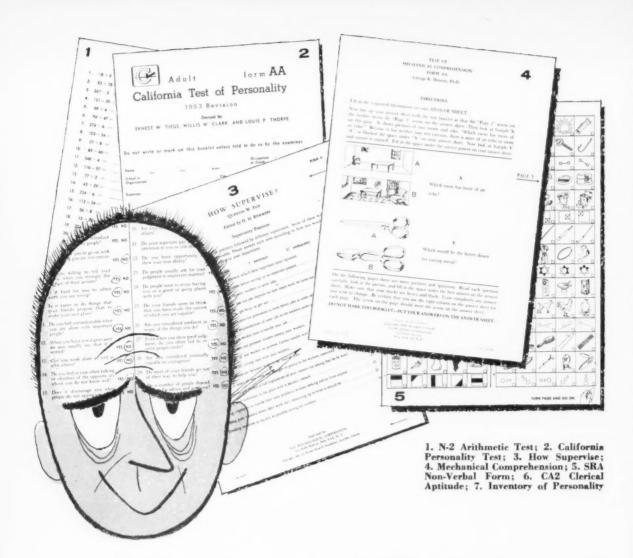
The development of loading methods can be compared to the procedure followed in the construction of a new building. In the construction operation the design engineer sketches to illustrate the needs and requirements of the user, makes computations and

drawings, and prepares specifications from which the builder works.

The same sequence is followed in the development of loading methods.

The design engineer develops a load plan for a specific commodity. He specifies the number of items to be loaded and their location in the carrier equipment. He designs proper blocking and bracing to meet regulations and requirements, and makes the actual computations which will insure that the loading method is satisfactory.

This results in a greater assur-(Please Turn to Page 86)



Selection and Training of

Motor transportation, 20 years behind in job studies and training, turns

THE MOTOR transportation industry, compared to existing management practices of other industries is approximately 20 years behind in the field of job studies, and training.

Every job in any company is subject to study. The studying of jobs is both formal and informal. In companies which have industrial engineering departments, a formal program of job analysis frequently is set up. Generally the following factors are determined about each type of job to be performed.

1. Job description—a word picture of what is done and accomplished on that job.

2. Job specification (sometime called man specification) — attempts to set forth the qualities

and characteristics looked for and essential in the person who is expected to do the job.

3. Job responsibilities and authorities—set forth the size of the job. The responsibilities and authorities precede the actual job duties, which are essential to carrying out the responsibilities of the job.

4. Job evaluation — an internal



By Carl G. Seashore, Director, Industrial Relations, Riss & Co.

Terminal Personnel

to standard tests for selection of new personnel

plan, or sometimes an industrywide plan of attempting to properly evaluate each job against each of the other jobs in the company, in order that each job pay what it should.

5. Job methods—deals with analyzing how to do it, in order to secure accident free and economical performance of the job.

6. Training Outline-consists of

a training plan for the instructing, training, and coaching of an employe to a level of acceptable job performance.

Sample Problem

In dealing with personnel, the motor transportation industry has found that there are major groupings of jobs, such as clerical, mechanics, production workers, etc. In a problem which faced Riss & Co. recently, we had the necessity of hiring and training:

One chief and three road dis-

Six master drivers, or drivers, or driver trainers who would be responsible for training and coaching the over the road driving personnel:

Thirty-two maintenance employes including mechanics, parts men, shop foremen, etc.;

Approximately 125 additional line drivers:

One operations manager and three dock foremen:

Sufficient dock personnel to take care of anticipated freight handling on or across the docks;

Clerical personnel to handle the analysis of logs and matching logs against tach charts:

A driver supervisor and his assistant, who are charged with handling the pay of the driver and assuring that the drivers are properly trained and coached. The master drivers report to the driver supervisor, although the line dispatchers are held accountable for the dispatching of the line drivers.

Procedures Evaluation

The General Office Industrial Relations Department now is evaluating Riss selection procedures for all types of motor carrier personnel. We have been working toward standardization and simplification of selection techniques, and it was not a difficult problem to set up personnel specifications and selection methods and procedures for this terminal project.

For the clerical personnel, a five-minute clerical aptitude test and a five-minute word usage test are employed if correct usage of language is involved. For typists and or secretarial help we use a standard typing test and a separate secretarial dictation test, recorded on a phonograph record. These simple tests determine quickly those applicants who have clerical, typing or secretarial aptitudes and abilities.

In this same five-minute grouping, an arithmetic test is used wherever the usage of figures is present.

(Please Turn to Page 95)

What Can Be Done About

More crew training, development of new cars, and free interchange can

REIGHT claim payments have reached staggering proportions. Needless to say, they represent a loss to all concerned—a loss that cannot be recovered.

In many instances, amounts paid in claims by carriers are considerably greater than revenues received for transportation of the damaged commodities. It certainly would seem that this money could be used better for capitalizing equipment that could better perform the carrier's job.

Loss to Industry Also

Claims are a loss to industry also. My company is engaged in the fabrication of aluminum. At present, we have a considerable backlog of orders. It requires a great deal of planning to operate mills at maximum efficiency. To accomplish this, it is necessary to schedule simultaneous running of all metals of the same alloy.

For example, the production of a mill for a particular day may go to 50 different customers. Those same customers will not order similar material for perhaps another two months. Therefore, we do not plan to run that type of material again until we have sufficient orders.

We prepare the material for shipment and deliver it to a carrier in a usable condition. In the course of transportation, the material sometimes is damaged to such extent that the purchaser cannot use it.

To keep his plant operating, we must put through a rush job order for this small quantity of special alloy. Naturally, this disrupts our entire scheduling program. Next By L. E. Galaspie

Director of Traffic, Reynolds Metals Co., Richmond, Va.

Vice President, Associated Traffic Club of America

we file a claim with the carrier for the damaged materials.

In filing the claim, we can file only for market value of the material at destination. Disruption of our schedules and other costly inconveniences cannot, under existing law, be a part of the claim.

What Can Be Done

The question is, "What can be done about the damage problem?"

To correct the problem, you first must know the cause of the damage and how to eliminate it.

There is little doubt that much work must be done with car loading crews. On the other hand, reports on cars in which impact recorders have been placed have been amazing.

From one plant we ship approximately 25 million lb of fabricated material every month. We placed impact recorders in many of the cars, some company-owned and some obtained from the carrier.

Increased Impact

Reports indicate that an impact of 4 mph no longer is normal. Nearly every car in which a recorder was placed received impacts of 6 or 7 mph. Few cars arrived at destination without sustaining shocks of 9, 10 or 11 mph.

Some shipments received at destination had blocking and bracing

reduced to kindling. In three or four instances, the impact was great enough to cause the stylus to go off the tape.

To eliminate and reduce damages, our company is spending about three times as much for blocking and bracing as it spent 10 years ago. This includes allowances for increases in labor and material costs. Because of the high cost of blocking and bracing, we have been forced in many instances to use motor carrier transportation, which does not require as much blocking and bracing.

Cost Differences

Recently, rail carriers expressed a desire to establish rates on aluminum which would make rail service competitive with motor carrier service. Our company conducted a study to determine the differences in costs.

It was found that costs ranged from 7 cents per 100 lb to as high as 35 cents per 100 lb more to load rail cars than trucks.

To obtain a weighted average, the movements were analyzed, placing the proper values on each segment. A weighted average difference of slightly more than 10 cents per 100 lb resulted. In order for the rail lines to be competitive with motor carriers for the same service, the rail rates would have to average 10 cents per 100 lb less than motor carrier rates.

This difference, of course, did not take into consideration the differences in transit time, reduction of damage costs, and other factors.

Even though shipments by rail are blocked and braced in such manner as to render them prac-

Damages?

cut claims by shippers

tically immovable, damages still result. A few carriers have declined claims on the basis that, since the blocking and bracing were intact, there was no evidence of rough handling. Yet, the material was in prime condition when shipped.

Floating loads have been tried with varying results. In several instances this type of loading has eliminated damage. In others, the damage was intensified.

For some years, the Packaging Division of our Traffic Department concentrated its efforts to produce packaging that would withstand the extreme battering of transportation. Thus protected, the material should arrive at the destination in the same condition as it was shipped. It rarely did.

New Solution

We began searching for another solution to the problem. We have found one—better equipped freight cars. However, here we are stymied. We are stymied because too many carriers want to spend pennies for equipment instead of dollars. They appear to be more anxious to have 1,000 new cars built at as low a cost as possible than to build half the number at a slightly increased cost, but with appliances to reduce damages to shipments.

Our studies have indicated that vibration is second to rough handling as a cause of damage.

Most of us have watched trains passing at high speeds and have seen numerous cars of these trains that seemed to have the St. Vitus Dance. Inside those cars, you can be sure, the loads were being sub-



Photography as a Tool

An increasing number of firms are finding photography an invaluable tool in the war on loss and damage. Pictures taken of loaded vehicles at departure and destination points are used as evidence in claims adjustments. The photograph above was taken through the open door of a loaded boxcar. Lamson & Sessions Co., of Cleveland, used the photograph to prove damage in transit in a claims case. The story of how a West Coast manufacturer makes even more extensive use of photography as a shipping aid is scheduled for publication in an early issue of DISTRIBUTION AGE.

jected to devastating contortions and gyrations.

All material used in the construction of boxcars have a natural sound frequency. If the natural frequency of a car is approximately that to which the commodity in that car is sensitive, when vibrations develop a resonance is set up in the commodity.

Many new boxcars are produced from metal which has a lower frequency than wood. These cars are placed in long trains and travel at high speeds, wherever possible. Very few roadbeds have welded rail joints. The result is that the cars rolling over the track, hitting the rail joints at high speed, set up a cyclical motion which tends to approach the frequency of the rail equipment. When this fre-

quency is reached, the equipment begins to vibrate.

It is well known that when a body of troops approach a bridge, an order is given to break step. If the troops moved across the bridge in step with the rhythm and cadence of a well-trained unit, it would tend to set up vibrations in that bridge which could be detrimental.

To break this destructive vibration in rail cars, the same principle must be applied. Admittedly, it is being done—but on a very, very small scale. Efforts must be increased. Action must be taken to bring the matter forcibly to the attention of those in charge of specifications and ordering of rail equipment.

(Please Turn to Page 131)

Route Service System Speeds Paperwork Process

Recent developments in equipment, interest in customer control, and time- and costs-saving methods, were basic considerations in installing plate/printer system on this firm's truck fleet



Addressograph with customer's plate stamps name, address, and identification number on laundry slip. The driver adds instructions by checkmark or notation

WITH growing emphasis on customer service, many firms are seeking improved customer contact systems. Better customer contact is sought for two reasons—to cut operating costs through greater efficiency, and to boost sales through better service.

Most improvements are being made in route service systems, where a company's driver-salesman contacts customers on a daily, weekly, or monthly schedule. The same type of systems apply to retail establishments that maintain door-to-door home delivery service,

distributors who deliver on schedule to retail outlets, and manufacturers who use their own truck for regular wholesale and retail delivery.

One such improvement, in the area of route service paperwork, has been developed by MacIntosh Associates, Inc., for Allen Laundry, of Allentown, Pa. (MacIntosh Associates is a group of laundry and dry cleaning establishments of which Allen Laundry is a member.)

The use of small, portable addressing machines on trucks and in call offices is not new in industry. However, recent developments in equipment, and much interest in customer control methods were basic considerations regarding the installation of a plate-printer system on the Allen truck fleet.

Many advantages have been claimed as a result of the system:

- Legible names and other information on laundry or dry cleaning tickets.
- 2. An easy method of determining customer control.
- 3. Speed in preparation of tickets.
- 4. Accuracy in names, addresses and special instructions.
- 5. A sales promotion device. (In some instances plates are presented to customers.)
- 6. An up-to-date customer list to encourage the routeman to make regular calls.



Narrow file contains a plate for every customer on the route. Plate for each successive stop is taken from front of the file and after use, inserted in route

7. Speedier clerical work in plant and office.

The equipment used in the operation of the system includes a special printing machine that utilizes embossed metal plates. Snapout carbon forms can be used, and plates stay clean because they do not contact the ribbon. The larger, automatic feeding type machine may be preferred for office work.

Plates and plate drawers are provided for each truck. Each drawer will hold 180 plates. An additional plate for each customer also can be used.

A machine is used in the office for embossing letters and figures on metal plates, subsequently to be used on the printing machine.

A plate cabinet equipped with trays for housing office and extra route plates also is needed.

The plates are filed by route and stop in special trays made to fit over the truck dashboard. The color of the index on the back of each plate identifies the pickup day.

On the basis that the plant is giving three-day, twice-a-week service—the three trays split a salesman's route into three sections: Monday-Thursday; Tuesday-Friday; and Wednesday-Saturday. Therefore, 540 plates a week become the pre-determined number of route calls.

In the office, plates are filed al-

phabetically. Monthly statements can be headed up at the rate of 1,000 an hour. By using automatic feeders, direct mail promotions can be addressed more rapidly.

New plates, changes, and plates to be removed can be handled systematically by the use of padded forms. A "Make or Change Plate" form should provide space for an imprint of the customer's plate. When routemen prepare such forms, small index cards are inserted in the plate trays to assist office personnel in quickly locating plates to be changed.

System in Operation

When the soiled laundry is picked up by the route salesman, the customer's plate is removed from the file tray on the truck dashboard, along with a laundry and/or dry cleaning slip. The slip is stamped on the special printer with the customer's plate, which lists the name, address, and identification number. The driver adds any necessary laundry instruction by checkmark or notation. Soiled laundry, when checked and tagged, is deposited in a hamper at the rear of the truck.

After use, the customer's plate is inserted in the rear of the file drawer, exposing the plate for the next call. These plate trays are flanged along the top edges. This prevents plates from being withdrawn except at the ends of the tray. Flanges also provide a safety guard against plates falling on the floor if a tray should be dropped accidentally.

Printer/plate system now is installed on this standard product delivery-type truck body, built by Boyertown Body Co.



The soiled laundry is checked and tagged, then deposited in hamper located at rear of the truck



Plant Relocation Cures Industrial Growing Pains

Some firms are moving their entire operations to new sites, others are establishing branch facilities at widely separated points. In either case the traffic manager should be the man with all the answers

AMERICAN industry again has growing pains. Some post World War II expansion plans already are obsolete.

In recent years plant relocation has come to the front as a popular cure for industrial growing pains. Relocation takes one of two forms. In some cases it involves the complete move of a plant from one area to another. More often, however, it involves the establishment of branch facilities in areas some distance from the home plant.

Although plant expansion usually is the prime mover in plant relocation, other factors are involved. The trend to industry decentralization, our continuing population (market) shift, and industry's growing fondness for suburban location all are contributing factors.

In considering plant expansion, the traffic manager should give some thought to plant relocation. Even if his present site is adequate for today's expansion plans, a long range study may indicate that relocation will be necessary 10 or even 20 years from today.

The TM's Role

When plant relocation is being considered, the traffic manager usually is asked to supply most of the facts upon which the decision is based. Often he will be asked to provide this material on an "overnight" basis. Unless he has



By Gustave D. Cederholm Head of Prime Distribution Div. Ballinger-Meserole Co., Phila., Pa.

An ICC practitioner and member of the New York Bar, Mr. Cederholm has had 30 years of experience in the movement and handling of goods.

For 15 years he was chief of National Biscuit Co's. Rate Division. From 1942 to 1946 he was superintendent of materials handling for E. R. Squibb & Sons. In 1946 he joined Warner-Hudnut as general traffic manager.

made a study of the subject, and unless he has kept a continuing file, he will be unable to supply the facts on demand. Problems of plant expansion and or relocation are too complex to permit overnight analysis or decision.

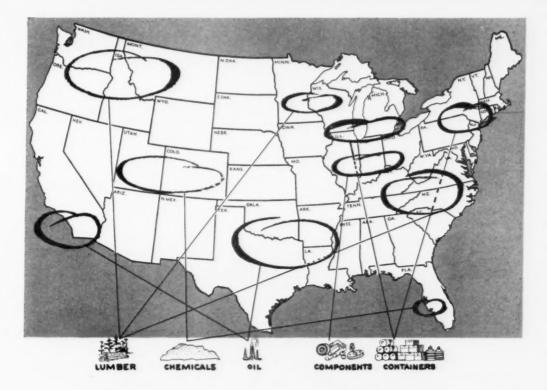
The importance of these problems varies from industry to industry, and from company to company within the same industry. The discussion that follows does not attempt to list all of the factors involved. It is intended to highlight only those problems which are most important, but which seldom get the attention they deserve. The article is limited to area location, and does not consider the exact positioning of a building within a given area.

Before an analysis is attempted, all concerned should have a clear understanding of corporate objectives. As a rule there are several, not all of which are clearly understood or even approved by all other departments.

Generally the traffic manager has a better picture of the overall operating requirements than other department heads. This stems from his daily contact with all other departments.

Once corporate objectives have been defined, the problem then becomes "how best to coordinate divergent views and requirements into a joint plan."

Usually it is desirable to establish an order of importance to the various considerations. It never is possible to satisfy all require-



Visual Aids Simplify Plant Relocation Studies

Maps, charts, graphs, and other visual aids can be of considerable help to the traffic manager making a plant relocation study. The raw materials and components map shown above is easy to prepare, and makes an excellent starting place for such a study.

The map shows that this manufacturer receives five basic components and raw materials from 10 widely separated sections of the country. A study of the types of materials to be transported from each section to the home plant, volumes involved, and transportation rates and charges permits the TM to pinpoint the ideal location on the map. In the same manner, the TM

can determine which of two or more pre-selected sites is best suited to relocation.

This ideal spot, of course, applies only to raw materials. A similar map must be drawn and similar studies made of the firm's market areas. The market spot then is weighed against the raw material spot, and the better of the two is picked or a compromise is made.

The process does not stop here. The compromise location is considered in conjunction with studies of labor markets, warehouse facilities, and other factors mentioned in the accompanying article.

ments 100 per cent. Some compromises will be made.

Markets

Often a business moves primarily to put itself in a better position to serve existing customers and/or to bring new ones into the fold. Whether the company is expanding into a new geographical area, or whether its expansion is due to the addition of new product lines, or whether the problem is simply to strengthen the corporate

hold on existing customers, the basic problem is apt to lie in the general area of marketing.

Each of the following points must be considered in terms of its relationship with the marketing function. If the answer to each is found, physical limitations on the marketing function automatically will be removed.

Raw Materials

Sometimes it is wise to relocate close to the source of raw mate-

rials. Often these are bulky and their shipment over appreciable distances are costly. Finished goods also can be costly to ship. Freight rates are higher on finished goods than on raw materials, and a method of shipment suitable for raw materials may not be suitable for the finished product. If it is less costly to ship the larger volume at lower rates you may want to locate close to your markets.

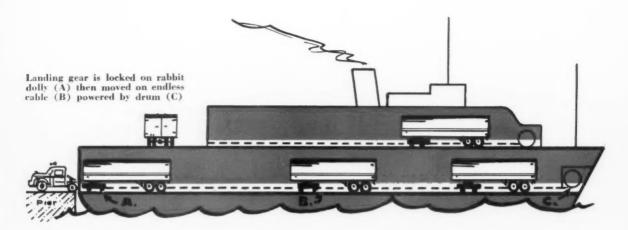
(Please Turn to Page 88)

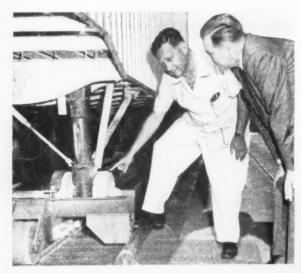


By Eric Rath
President, TMT Trailer Ferry, Inc.

A Second Look at

Trailership inaugurates the first transport





Above: The "Trailerloader" consists of two parallel steel guide rails, a double track, and a rabbit dolly on which the trailer landing gear is locked during loading of ship

Right: Interior view of lower trailer deck of Queen shows raised metal cloverleafs for lashing to the deck INTERCONTINENTAL movement of freight entered a new era recently when highway trailers from Europe began rolling on U. S. highways.

Trailers which a short time before had loaded wines, champagne, cheese, and tires at shippers' docks in France were driven away from the "TMT Carib Queen" in Philadelphia. Their destinations were receiving docks of consignees where the actual shipments would be handled for the first time since leaving Europe.



Trailership Service

service of highway trailers between U.S. and Europe

The first ship in this service bridging the Atlantic is the largest and fastest of the roll-on, roll-off self-propelled truck trailer-ships. The Queen made its first eastbound sailing from Brooklyn Army Terminal with a full trailer cargo load. The ship is under three months charter to the Military Sea Transportation Service.

Growth of TMT

This new trailership service is the latest development in the growth of TMT Trailer Ferry, Inc.

The firm has built a successful trailerferry operation between Jacksonville, Fla., and Puerto Rico, the Windward, Leeward, and Virgin Islands. It operates or has under construction 12 vessels and more than 500 over-the-highway units.

TMT considers trailerships a new type of shipping. New only in the respect that it is an exploitation of an old principle which had not been applied before in marine shipping.

Fundamental Beliefs

Certain fundamental beliefs in this new type of transportation guided TMT in developing its business.

It is our firm conviction that a trailership is a type of cargo ferry vessel which is adaptable only to a certain trade route. Trailerships should be built in a size appropriate for the routes they will serve. We do not believe that a trailership capable of carrying more than 200 trailers is economically feasible.

We believe that the speed of trailerships will have a great bearing upon the future development of the merchant marine. However, the speed aspect should not be overdone. A speed between 18 and 24 knots will be needed for the average trade route, which would bring it within the limit of the economic and financial requirements necessary to create a more sound merchant marine.

Automation Field

There is a great opportunity in the field of automation on trailer-ships. With regard to port facilities, the U. S. Maritime Administration has shown a strong interest in standards being developed for port facilities to serve trailerships. We believe that these standards must have simplicity plus ample space for operations.

TMT also has found that not more than one deck should be loaded over one ramp in one location. This avoids the complicated double-deck structures which have been designed by proponents of new roll-on ideas.

We believe that the location of ramps must be standardized just like the width of a railroad track or the width of highway vehicles. Once these standards become established, ship operators will know in advance that a trailership can enter almost any port prepared for roll-on operations and find proper berthing and loading facilities.

As far as the trailership itself is concerned, the public has been largely misled into believing that trailers can be moved into trailerships with an ordinary tractor. It won't work.

New System

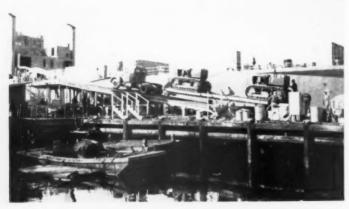
More than half a million dollars in research on this problem during the past four years has re-(Please Turn Page)





Above: The 8,039-ton "TMT Carib Queen" is 475 ft long with a 72-ft beam. It is powered by steam turbines

Left: Stern view of the Queen shows the double loading ramp through which trailers reach the bottom deck



Tractor moving heavy equipment up portable ramp to load "TMT Carib Queen." Ramp at upper left is built on ship for loading upper deck

A Second Look . . .

(Continued from Preceding Page)

sulted in TMT's developing a new system. This system, which has been included in the "Carib Queen," utilizes an electrically controlled mechanical device. A special dolly is clamped under the landing gear of a trailer and a patented device called the "Trailerloader." using tracks and cable controls within the ship, automatically moves the trailers to the desired location on the vessel. We can now state with confidence that we can load and unload a "Queen" sized trailership with approximately a hundred trailers in, a hundred trailers out, a hundred automobiles in and a hundred automobiles out within four hours.

As for safety of cargo on trailer-

ships, this too has required study. After a sad experience in which we lost trailers over the sides of our vessels in the early days, we developed a specialized metal tiedown and jack-up device. This device makes the trailership deck and the truck-trailer deck or body virtually one unit. Our basic principle consists of getting the trailer off its own weight by jacking it up and tving it down at the same spot. The dependability of this lashing device was demonstrated last year when we carried on the upper deck of a trailership a load of 33 trailers and came within 60 miles of the center of Hurricane Ione without the loss of a single trailer.

There has been a lot of discussion about whether trailerships are practical in an economic sense. The only concept which will ultimately prevail in the merchant marine is an idea or method which will pay its own way, make a fair profit for the owner, and expand his fleet. This applies to competitive foreign shipping as well as the American merchant marine.

There also has been much discussion about the fact that below the trailer and the deck of the trailership there is an apparent loss of four feet of space, and consequently an apparent loss of cube capacity. Like architects who design homes without basements and feel that there is no loss of cube space, our designers build trailerships to meet requirements of the service.

A trailership is the equivalent of a big building that will move from point A to point B at a certain speed. How much that speed will be depends upon its power and design and how much you want to spend on it. It is similar to devising a system to get the maximum occupancy for a piece of real estate.

The National Academy of Sciences studied an operation of a modified C-2 which will make a trip from New York to Bremerhaven. The actual cost of operation given by the Academy was, in the opinion of many, much lower than the actual cost of operating a commercial ship when on a berth in the Port of New York.

(Please Turn to Page 92)

Trailer leaving lower deck of the "TMT Georgia" at the Jacksonville terminal. It serves San Juan, Puerto Rico

One of TMT's LST trailerships enroute to San Juan after its 1,100-mile voyage. Loading takes about 8 hours





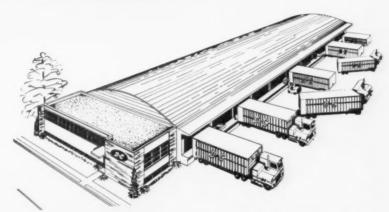
Modern Terminal Design

Terminal modernization includes every phase of the operation—from building construction to handling techniques to paperwork systems illustrated below are a few recent examples of modern terminal design



TWO MILLION POUNDS A DAY—This new Los Angeles terminal of Pacific Intermountain Express includes a two-story office, a truck shop, and a 705-ft trailer dock capable of accommodating 144 trailers at one time. Dock and office are of concrete and steel construction.

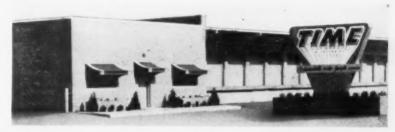
STRATEGIC LOCATION—Denver-Chicago Trucking Co. opened this new terminal in Kansas City in February with two purposes in mind. It was built to keep pace with Kansas City's industrial expansion, and to provide another link in the firm's coast-to-coast, non-stop service with two-man sleeper cabs. The new terminal is staffed by 29 persons, and incorporates the latest design factors in both construction and operating facilities.



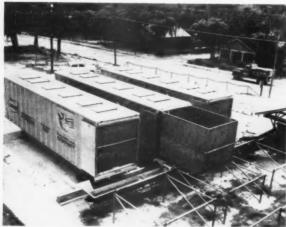


IN-FLOOR TRUCK DRAG—Flint, Mich., is the location of Associated Truck Lines' newest ltl terminal. The terminal is located on six and one-half acres of land in the heart of Flint's industrial area. The 13,824-sq ft terminal has a 60 x 180-ft dock and 35 truck spots. The materials handling system is built around an in-floor truck dragging system.

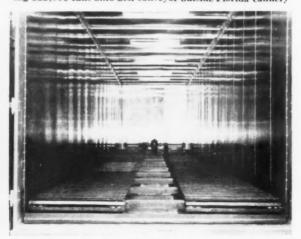
MASONRY AND STEEL—T.I.M.E., Inc., recently dedicated this new \$375,000 terminal in Oklahoma City. It has a 70 x 160-ft freight handling area which will accommodate 30 city or line-haul units simultaneously. A concrete ramp provides ground to dock loading facilities.



Zip-in Liner for Highway Trailers Speeds Handling of Jumbled Loads

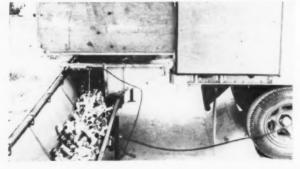


Liner of the center trailer is partially extended in unloading 125,000 cans onto belt conveyor outside Florida cannery



Conveyor developed by Link-Belt Co. is self contained and can be removed readily to use the trailer for other service

Liner compartment extended beyond tail gate is unloaded into cross conveyor to plant where cans are unscrambled



Storage space reduced, handling costs cut, and output increased for can maker using new live-bottom trailers and liners

A ZIP-IN liner for trailers—one of the latest developments in highway transportation — is speeding up loading and unloading operations. Using the new method, a manufacturer loads jumbled cans into a compartmented trailer liner. The loaded liner then is moved into the trailer on a small, reversible conveyor and the vehicle is ready for the road. Hatches in the trailer roof permit loading after the liner is in place.

At the destination, the liner is rolled out. As it clears the tailgate, a trap door on the under side of each compartment swings open, discharging cans into a belt conveyor which carries them to the production lines.

In the initial test runs, each liner-box held 125,000 cans. This was a load of 10,280 lb on the conveyor.

Bolted to the bed of the trailer, the conveyor system consists of two slat conveyors that operate at 12.8 fpm. They are powered by an electric motor which is connected to power outlets at the shipping and receiving docks. The complete live-bottom device, exclusive of motor, stands 81/6 in. above the trailer floor. It can be removed when the trailer is needed for general service.

This technique was initiated by S. S. Nicholson, packaging and materials handling supervisor of American Can Co., to ship 6-oz decorated orange concentrate cans from a plant at Plymouth, Fla., to Minute Maid canneries at Plymouth and Leesburg, Fla. According to Nicholson, it has minimized warehousing at the canneries, reduced handling costs, and increased output.

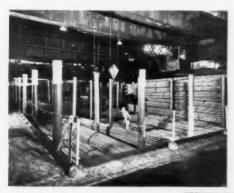
It also eliminates expensive dunnage such as liners, fillers, and bracing used in the conventional method of shipping cans.

Conditions which have made this operation profitable are: a large volume of single size product, a continuous line operation enabling direct unloading of trailers, a favorable rate structure for delivery, and a reasonable trucking distance.

UNUSUAL APPLICATIONS

of Basic Materials Handling Equipment

Have you ever thought of running your in-floor truck dragging conveyor outdoors, or storing your products in a hole in the ground, or using your shipping container as a tote container?



HOLE IN THE GROUND STORAGE: When inplant storage space could not be expanded upward or outward, National Supply Co. dug holes in the ground for a 40 per cent increase in several locations at its Ambridge, Pa., plant. More than 120,000 cu ft of additional space was provided for seamless pipe in four storage areas.

OUTDOOR CONVEYOR: An in-floor truck dragging conveyor, subject to temperature extremes ranging from 250 deg F to sub-zero forms an integral part of the assembly line of the Chicago Tractor Works of International Harvester Co. The line carries dozer and grader parts through finishing operations to outside storage.





EXPENDABLE TOTE CONTAINERS: Purite fused soda ash for foundry use is being shipped by Olin Mathieson Chemical Corp. in non-returnable pallet boxes which reduce car unloading time by as much as 90 per cent. With a 700-lb capacity, the boxes are of open-top wooden construction with wire binding reinforcement. The pallet base permits easy handling with standard equipment, and the boxes can be stacked four high without crushing.



A PLATFORM HOIST:
A platform hoist that
moves sideways as well as
up and down has been installed by American Air
Filter Co. of Morrison, Ill.
The problem was created
by a need for storage
space in a limited area for
many sizes of electric motors. A self-powered fourway ladder of heavy steel
solved the problem.



Maintenance accessibility is feature of Mercury lift



Ballymore work platform elevates to 10 ft height



Pallet rack is made from Acme Steel slotted angle

Previews 7th Materials Handling Show and Conference

AMHS Conference to study materials handling as the key to automation. More than 200 plan exhibits in five-day Philadelphia show

Barrett-Cravens electronic

tractor follows white line

TEW PRODUCTS and new uses for established products will vie for attention of materials handling men during the Seventh National Materials Handling Exposition and Conference in Philadelphia.

Both events will be held at Convention Hall, the show running from April 29 to May 3 and the conference opening April 30 and ending May 2.

Sectional conferences, sponsored by the American Materials Handling Society, will be held from 9:30 a.m. to 12:30 p.m. As a general theme, the AMHS has chosen "Materials Handling... The Key to Automation."

The schedule lists three conferences, each consisting of three

topics, running concurrently each day. Conference attendance is by paid registration. Show registration is free.

To receive registration tickets for the show, to be filled out in advance to save time, and forms for conference registration, write to Materials Handling Exposition, Clapp & Poliak, Inc., 341 Madison Avenue, New York 17, N. Y.

Exhibitors' List

Following is a partial list of the more than 200 exhibitors along with booth number and a brief description of their featured display. A complete show round-up will be published in the June issue of Distribution Age.

Acme Steel Co.

910-912

Dexion Div. displaying slotted angle, all-purpose framing material; Steel Strapping Div., The F1E semi-automatic strapping machine. Circle 31 on Card Facing Page 69

Allen Iron & Steel Co.

Two items to be exhibited—a stock

pallet rack and a stacking rack used for handling coils and reels. Circle 32 on Card Facing Page 69

Allis-Chalmers Mfg. Co. 1035, 1041

A tractor shovel attachment with a 1½-yd bucket to stockpile, reclaim, and load bulk materials of all kinds. Circle 33 on Card Facing Page 69

The American Pulley Co. 1211, 1215

A redesigned line of portable elevating trucks including fork and platform trucks, drum stackers, etc.

Circle 34 on Card Facing Page 69

Anthony Company

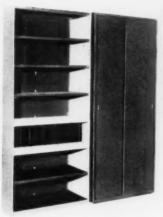
315

A light-weight lift gate, 1000-lb capacity, for larger trucks handling light, bulky loads will be shown.
Circle 35 on Card Facing Page 69

The Ballymore Company 1110

A hydraulically operated work platform for production and maintenance work above ground level. Heights can be increased from 5 to 10 ft.

Circle 36 on Card Facing Page 69



Standard Pressed Steel Co. closed steel shelving units



A light-weight lift gate produced by the Anthony Co. has a lift capacity of 1000 lb



An electronic industrial tractor which requires no operator and eliminates the need for a guide wire on the floor. Circle 37 on Card Facing Page 69

Beacon Machinery, Inc. 1135

Operating full size automatic pallet loader, a 3 x 4 ft hydraulically operated lift table, hydraulic dock ramps, and pallet dispensers.

Circle 38 on Card Facing Page 69

Bendix Radio Div.

Bendix Aviation Corp. 915

Dyna-Com, Bantam and Quiet-Line mobile radio communications equipment. Demonstration of two-way radio between dispatcher and car. Circle 39 on Card Facing Page 69

Wm. Christensen Co., Inc. 1146

Roll-O-Vator, a low cost portable lift. Loads cars and trucks from ground level. Is available in 2000, 4000, and 6000-lb capacities.

Circle 40 on Card Facing Page 69

Coles Cranes, Inc. 929

Model S-1210 gasoline-electric, fullcircle-slewing mobile crane. Has a lifting capacity of 12 tons throughout the full circle.

Circle 41 on Card Facing Page 69

Continental-Diamond Fibre
Div. The Budd Co. 428

Complete line of Diamond vulcanized fiber materials handling containers: fiber boxes, trucks, cans, baskets, etc. Electrical insulating materials.

Electrical insulating materials. Circle 42 on Card Facing Page 69

Economy Engineering Co. 942

Walkie-Worklifters are light weight with capacities from 1000 to 2000 lb. Lifting heights from 58 to 120 in. Narrow frames or straddle bases. Circle 43 on Card Facing Page 69 Equipto Div.

Aurora Equipment Co.

Newly designed steel work benches featuring double drawer sections, drawers and cabinet, double cabinets, sliding-doors beneath work surfaces, Circle 44 on Card Facing Page 69

Evans Products Co. 110, RR siding

DF Loader Equipment, the new Evans Coil Car and the Quick-Loader, a partitioning and load-locking device for box car shipments.

Circle 45 on Card Facing Page 69

The Fairbanks Co. 42

New Lamilon all-plastic nylon-reinforced wheels, Lockweld steel casters, vulcanized rubber tired wheels, hand trucks, etc.

Circle 46 on Card Facing Page 69

A. B. Farquhar Div., The Oliver Corp. 751, 753, 755, 759, 763

Oliver Super 55 Fork Lift truck. Six forward speeds, power steering. Lifting cap 4000 lb with both 8-ft and 10-ft mast models.

Circle 47 on Card Facing Page 69

Federal Fibre Corp. 1

Fedco mill and tote boxes, made to stack or nest, and box trucks of heavy gauge electro-galvannealed ribbing to prevent corrosion.

Circle 48 on Card Facing Page 69

Ford Motor Company 13

The new four-cylinder overhead valve type, heavy duty 220 diesel industrial engine is rated at 24.8 AMA horse-power.

Circle 49 on Card Facing Page 69

Globe Hoist Co. 730, 825, 829

Trans-O-Matic, a new line of automatic dock leveling ramps available for electric power or air-oil operation. Platform is 6 ft x 8 ft 4 in.

Circle 50 on Card Facing Page 69



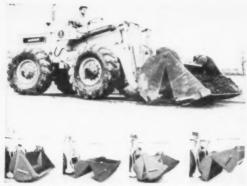
Link-Belt will feature a one-man crane with 15-ton lift capacity



Toledo Scale Co. will exhibit electronic weight data systems

Lamson Mobilift will exhibit its latest trucks with attachments





The Frank G. Hough Co. is equipping Payloader tractor-shovels with four-in-one buckets



A safety stop to prevent free-falling featured in units by Kelley Co.

1009



Pullman-Standard will show compartmentizer

DA Previews 7th . . .

(Continued from Preceding Page)

B. F. Goodrich Co.

Complete line of industrial tires for all types of materials handling equipment plus various types of belting. Circle 51 on Card Facing Page 69

Hartman Metal Fabricators

Model 6000 retractable lip power dock; Flexirack, fully adjustable pallet rack; adjustable shelf trucks and traveling racks.

Circle 52 on Card Facing Page 69

Frank G. Hough Co. 1020, 1030

Line of four-wheel-drive Payloader tractor-shovels with Drott buckets as optional equipment. Can be used as a shovel, clamshell, scraper, bulldozer. Circle 53 on Card Facing Page 69

International Harvester 1119, 1129

Two heavy-duty all-wheel-drive trucks, the R-190 rated at 29,000 gvw and RF-190 with choice of bogies to provide gyw ratings of 38,000 or 43,000 lb.

Circle 54 on Card Facing Page 69

International Staple & Machine 716

A portable vacuum - lifting device, known as the International Air-Lift, for moving bulky, hard-to-handle materials. Lifts up to 200 lb. Circle 55 on Card Facing Page 69

Joy Mfg. Co.

A pre-fabricated conveying system of pipe frame truss construction, rigid, rugged straight. Adaptable to any and all accessories.

Circle 56 on Card Facing Page 69

1115 Kelley Company, Inc.

Hi-Lo automatic dockboards with a positive safety stop which prevents free-falling of the dockboard if truck pulls away

Circle 57 on Card Facing Page 69

Lamson Mobilift Corp.

side-shifter, new remote control device and revolving apron will be among the latest industrial truck attachments to be shown.

Circle 58 on Card Facing Page 69

R. G. LeTourneau Inc. 1001

This new improved motor trolley hoist requires 37 per cent less headroom with precision load control to within 008 of an inch

Circle 59 on Card Facing Page 69

G. B. Lewis Co. 1002

Added to the four standard size Stack-n-Nest one piece fiber glass reinforced polyester tote pans is the new size 27 x 16 x 11 in.

Circle 60 on Card Facing Page 69

Link-Belt Speeder Corp. 936

A power hydraulic controlled yardcrane with 15-ton lifting capacity is rubber-tire mounted, self-propelled, and one-man operated.

Circle 61 on Card Facing Page 69

Lok-Rak Corp. of America

Pal-Lock, an adjustable cotton webbing pallet and load strap, with formed tempered hooks at both ends which will attach to a pallet board. Circle 62 on Card Facing Page 69

Loomis Machine Co.

An automatic truck ramp completely truck-actuated requiring no manual attendance. Available in recessed and self-contained models.

Circle 63 on Card Facing Page 69

The Lug-All Company

Model 3000-30 winch hoist equipped with 30 ft of cable and Handy Angle, a new cold rolled steel slotted angle for use on benches, shelves, etc. Circle 64 on Card Facing Page 69

Manning, Maxwell & Moore, Inc. Shaw-Box Crane & Hoist Div.

Two new lines of Budget Hi-Cap Trolleys, one a push type the other hand geared, with capacities from three through ten tons.

Circle 65 on Card Facing Page 69

Marsh Stencil Machine Co.

Electric and hand-operated stencil cutting machines; electric Dial-taper and Twin-taper machines for dispensing moistened gummed tape, etc.

Circle 66 on Card Facing Page 69

Mercury Mfg. Co.

A completely new gasoline-powered fork truck, 4000-lb cap, featuring complete maintenance and operation accessibility will be shown.

Circle 67 on Card Facing Page 69

Mighty Mover Co. 1124

Dolly has two 4-in. roller-bearing cast iron wheels. Top plate swivels 360 deg. Weight 40 lb. Capacity to 100,000 lb.

Circle 68 on Card Facing Page 69

Motorola, Inc. 1237

Single-unit console providing selective calling facilities for land-mobile twoway radio base stations.

Circle 69 on Card Facing Page 69

Ottawa Steel Div. of L. A. Young Spring & Wire Co. 960, 1053, 1059

A new Tracto-Lift with 21-ft lifting height includes overhead guard, shuttle transmission (six speeds forward and reverse) and power steering.

Circle 70 on Card Facing Page 69

Oxy-Catalyst, Inc.

Catalytic exhaust purifier burns exhaust components of gasoline-powered industrial trucks. Eliminates 90 per cent carbon.

Circle 71 on Card Facing Page 69

Pullman-Standard Car Mfg. Co.

RR Siding

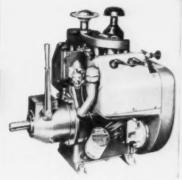
Three cars, a PS-1 box car, an insulated box car equipped with Compart-



Two new heavy-duty all-wheel drive International trucks will be shown



Loomis Machine Co. is the manufacturer of a new truck-actuated ramp



A new 30-hp V-4 engine will be shown by Wisconsin Motor Corp.

mentizer Gates for lading protection, and a PS-2 covered hopper car.

Circle 72 on Card Facing Page 69

Radio Corp. of America

Two way radio equipment and sys-, tems for materials handling, plant maintenance, and plant security. Circle 73 on Card Facing Page 69

Rapids-Standard Co. 116, 215, 211

The new magnetic Press-Veyor, traffic controller, and automatic transfer unit, and the Controlled Flow System. Circle 74 on Card Facing Page 69

Sherman Products, Inc.

Fork lift attached to Ford tractor is an all-purpose transporter with extra ground clearance, wide tire treads, and large wheels. Circle 75 on Card Facing Page 69

1310, 1312 Stackbin Corp.

The complete line of stackbins, stackracks, stacking trays, shop boxes, and shelf hoves.

Circle 76 on Card Facing Page 69

Standard Conveyor Co.

Complete line of gravity and power conveyors: multi-level, incline belt, portable Handibelt and reversible live roller.

Circle 77 on Card Facing Page 69

Standard Pressed Steel Co. 1147

New Erectomatic shelving with locking device holding each shelf firmly in place. Can be altered without tools to meet storage requirements. Circle 78 on Card Facing Page 69

Sten-C-Labl Inc.

A squeeze-feed applicator of ink permits clear, sharp impressions when used to address direct to cartons, printed labels, or tags. Circle 79 on Card Facing Page 69

Sterling, Fleischman Co. 1352 A one-man hydraulic drum lift. Used with steel or fiber containers of any size.

Circle 80 on Card Facing Page 69

Sturdi-Bilt Engineering Co. 1206

Adjustable storage rack composed of three basic parts only—can be used interchangeably for pallets, skids, cased goods, etc.

Circle 81 on Card Facing Page 69

1036, 1042 The Thew Shorel Co.

Fully convertible from crane to shovel. clamshell, drag and hoe is the Model SP-107 self - propelled machine. Designed for all-around lifting and dig-

Circle 82 on Card Facing Page 69

Toledo Scale Company

A new line of electronic load cell scales giving users the benefits of electronic instrumentation in indicating and recording weights.

Circle 83 on Card Facing Page 69

Uhrden, Inc. 1306

Tubar twin cylinder hydraulic dumper designed to elevate loads up to 2000 lb. at heights up to 60 in.

Circle 84 on Card Facing Page 69

Union Wire Rope Corp.

The entire line of Tuffy slings with a complete line of fittings. Samples of the Tuffy hoist lines.

Circle 85 on Card Facing Page 69

Unit Crane & Shovel Co. 806, 905

Two mobile cranes Model 357 and 1520. Self-propelled, operated by one man, powered by one engine, hydraulic

steering, short turning radius, etc. Circle 86 on Card Facing Page 69

Weber Marking Systems Div. Weber Addressing Machine Co.

Dual-80 label reprinting machine prints from rubber mat or stencil shipping and product identification labels at the rate of 105 a minute. Circle 87 on Card Facing Page 69

Wisconsin Motor Corp.

An air-cooled, 30-hp, 4-cyl, V-type engine of basic high torque design, heavy - duty construction — operating at maximum speed of 2800 rpm.

Circle 88 on Card Facing Page 69



Weber Addressing Machine Co. will show a new label printer



Sturdi-Bilt storage racks use uprights, beams, and wedge locks

Addresses are stenciled on boxes with a new Sten-C-Labl



DA JE

Wheel with New Tire

A new type of wheel with a tire

composed of Disogrin has been intro-

duced by Greer Industries Inc. The

new wheel's load-carrying capacity

has been rated up to 2000 lb for a

4 x 3 in, wheel. This feature enables

the wheel to stand under stationary

heavy loads for extended periods without developing appreciable flats.

It also has low rolling resistance and

Circle 89 on Card Facing Page 69

PRODUCTS

FOR FURTHER INFORMATION

Elevating Tailgate

A new electric elevating tailgate for one-half and one ton trucks will lift up to 600 lb in 15 seconds, it is reported by the manufacturer, Mid West Body & Mfg. Geared to eliminate battery drag, it is powered by a

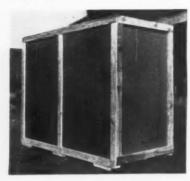
reversible motor and has a built-in motor brake. The push button control has a built-in lock for security. An all-steel ramp-type installation, it weighs 225 lb. All moving parts run freely on ball bearings.

Circle 91 on Card Facing Page 69

Furniture Storage Boxes

resists abrasion.

A complete line of low-cost furniture storage boxes is being produced by Shore Mfg. Co. All boxes have permanently attached skids for fourway entry of fork lift truck. Designed



for quick assembly, they are available in sizes ranging from $8 \times 4 \times 3$ ft to $8 \times 6 \times 8$ ft. Panels are of hardboard, eliminating the danger of breakthroughs and making the box moisture resistant. Corner posts are two by fours, permitting double or triple stacking.

Circle 90 on Card Facing Page 69

Ball-Transfer Unit

A newly designed ball transfer unit developed by Metzgar Conveyor Co. has an open retaining cup to permit continuous self clearing and prevent clogging. The cup is designed to support the ball on friction reducing protrusions that require no lubrication. The ball can be snapped in or out without tools for total cleaning.



The entire unit is impervious to food acids, steam cleaning, brine, detergents, mild acids, alkalis, oil, sand, grit, and weather conditions.

Circle 92 on Card Facing Page 69

Pneumatic Unloader

Sprout, Waldron and Co., Inc., has announced a new portable unloader which attaches to the outlet of airslide cars. It will convey such materials as starch, sugar, clay, urea, phenolic moulding compounds, and synthetic resins. This all-weather unloader is of rugged construction with the complete assembly mounted on an aluminum frame. It weighs 1045 lb and can be handled easily by two



men. A variable speed drive makes possible a mechanical adjustment in the feed rate from the outlet of the cars. This insures a constant rate of flow into the bulk delivery bins. Systems now in use deliver capacities in excess of 17 tons per hour.

Circle 93 on Card Facing Page 69

New Medium-Duty Tractor

Diamond T has started production on a new medium duty field truck listing 25,000 lb gvw and 43,000 lb gcw. Frame, axles, engine, clutch, transmission, steering gear and brakes are all long-tested in service. Aside from these, engineers have



added many new features such as quick-detachable fenders that leave the engine compartment wide open. The alligator hood of earlier models has been replaced by a wing-type hood. The power plant is a six-cylinder, valve-in-head engine. A heavy-duty five-speed transmission with constant mesh helical gears in third and fourth speeds is included. Over-drive is optional.

Circle 94 on Card Facing Page 69

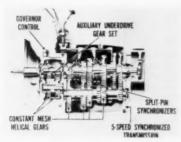


nd EQUIPMENT

EASE USE THE READERS' SERVICE CARD

Road Truck Transmission

To fill transmission requirements of highway trucks, Clark Equipment Co's Transmission Div. has developed a new semi - automatic heavy - duty truck transmission which minimizes shift lever and clutch pedal manipulation. The new development is an integrated combination of a fivespeed synchronized transmission and an auxiliary gear train. The auxiliary



unit is composed of a direct and an underdrive gear set which are semiautomatically engaged. The ten closely spaced gear ratios produced result in fuel economy and savings in engine and transmission wear.

Circle 95 on Card Facing Page 69

Battery Cell Filler

A battery cell filler which controls the electrolyte level in batteries is available in five models for general industrial uses. Connected to a water supply, the Rite-Hite is inserted into



the cell opening to the proper depth. as determined by a stop on the tube. When the electrolyte level covers the end of the tube the flow stops. It is manufactured by Gould-National Batteries, Inc.

Circle 96 on Card Facing Page 69

Motorized Hand Truck

A new motorized hand truck, manufactured by Walco Supply Co. permits rapid loading, unloading, and handling of objects weighing up to



1000 lb. It will operate in yards as well as warehouses, having two powered wheels and oversize pneumatic tires. There are three foward speeds and one reverse.

Circle 97 on Card Facing Page 69

Box Printing Machine

A hopper feed attachment has been built into a new automatic box printing machine designed for in-plant oneration. Depending upon the sizes of



the boxes, this flat box printer will take up to 3000 cartons per hour. Need for an extensive inventory of pre-printed boxes is considerably reduced by printing boxes at the time of packing. Manufactured by Algene Marking Equipment Co., the flat box printer will mark one or all panels and flaps.

Circle 98 on Card Facing Page 69

Portable Hand Plier

The Fastener Corp. has announced an improved air plier for the shipping and packaging industry. It is designed to staple corners of telescopic type cartons, tops of heavy bags, and corrugated inserts. Being lightweight and easily portable, it allows the worker to take it to the work instead



of moving the work to a large stitching machine. The air-driven stapler operates on 50 to 110 lb air pressure, with the stapling power adjusted by regulating the air pressure.

Circle 99 on Card Facing Page 69

Portable Tying Machine

Featuring an automatic twist-tie. the new Inland Speed - Flo portable. semi-automatic tying machine is engineered to new heavy-duty production standards. Added strength has been engineered into parts subject to hard wear with resulting minimum maintenance. Tying head can be conveyor



mounted to satisfy the individual production program. Operating specifications state capability of as much as 20 ties per minute-and bundle sizes unlimited within the 19 through 16gage range.

Circle 100 on Card Facing Page 69 (Please Turn Page)

PRODUCTS and EQUIPMENT CONTINUED FROM PREVIOUS PAGE

Permanent Dock Board

A complete line of standard magnesium dock boards for installation on concrete docks has been announced by Magline Inc. According to the



company, the new line represents a practical answer to high cost of permanent installations on the dock. They can be operated either by hand or by power. More usable dock space results from their minimum set-back.

Gircle 101 on Card Facing Page 69

Conveyor-Line Marker

Willam A. Force and Co. has added a small conveyor-line marker to its series of heavy-duty equipment. The new model is an automatic continuous



rotation conveyor - line marker of small diameter and narrow wheel for imprinting light packages and other items requiring type impressions not to exceed % in. in height.

Circle 102 on Card Facing Page 69

Low-Cost Passenger Trailer

To solve the problem of transporting personnel through large plants, the Mercury Mfg. Co. has developed a new low-cost passenger trailer for use in trackless trains. Powered by



a towing trailer, it can seat six passengers. A modified seating arrangement on the 49 x 120-in, platform will provide nine seats.

Circle 103 on Card Facing Page 69

Adjustable Storage Rack

Pallet racks which extend across aisles are made possible through the use of components manufactured by Sturdi-Bilt Steel Products. The adjustable racks can be used interchangeably for pallets, skids, dies, bulk or combination storage. They



are assembled without bolts, nuts, erection welding or special labor. Three basic units—upright frames, support beams, and floating wedge lock—are required. Supplementary parts permit multiple rack uses. The parts are joined by a new method which tends to increase the rigidity of the entire rack when loading is increased.

Circle 104 on Card Facing Page 69

Portable Refrigeration

Portable refrigeration, in a convenient size, is the keynote of the new "Frozen Food Transporter" which utilizes foam plastic as its insulation agent. Insulated with polystyrene foam plastic 4-in. thick on all sides, top, and bottom, the box is lined in



non-corroding sheet metal for sanitation and easy quick cleaning. A single block of dry ice serves as the refrigerating agent for a full working day. The transporter holds about 100 lb of frozen food and has a capacity of about 3 cu ft. Molded and shaped insulation parts for the transporter were fabricated by Glo-Brite Products. Inc.

Circle 105 on Card Facing Page 69

Versatile New Crane

Efficiency, versatility and economy are combined in a new 135-lb, all-steel crane. Made by Bacon Crane & Hoist Corp., it can be rotated in a complete



circle, has an I-beam boom, uses a pipe mast, and has a lock bolt to restrain swing. It can be used on a truck, a marine dock, at public buildings, warehouses, or residents. It is sold with or without hoist.

Circle 106 on Card Facing Page 69

Convertible Road Trailer

A new convertible platform trailer with folding sides has been developed by Great Dane Trailers. Used as a platform trailer in one direction, it can be adapted for dry cargo service on the return trip. It may be used as a flat bed, open top, or closed van



unit, depending upon cargo requirements. The unit is a flat-bed trailer with a wood floor. The sides are constructed of extruded aluminum cargo flooring. As an open top van the four-foot high sides are locked in vertical position by four sliding latches on the headboard. Bows and spreaders are put in place and a tailgate mounted. If weather conditions require, a tarpaulin is put over the roof bows. When used as a platform trailer, the sides are folded down onto the floor and bows, and tarpaulins stored in a box under the unit

Circle 107 on Card Facing Page 69

Double-Duty Highway Van

Unusual versatility is provided in a new livestock van which can be converted quickly for dry freight by inserting plywood panels into optional side channels. Fruehauf Trailer Co., maker of the highway van, reports a weight saving of up to 300 lb through a new design using stressed-skin construction. Each of the vertical side



panels is pierced with vent openings that are flanged to convert them into important structural elements and to remove the possibility of injury to the cattle. Panels, in turn, are supported by integrally formed sturdy posts. The interior is completely smooth, sealed, and free of crevices. Multiple decking can be easily installed when desired. Net payload capacities range from 25,000 lb for a single-axle model to 36,000 lb for a tandem axle model. Lengths range from 30 ft. 6 in. to 40 ft.

Circle 108 on Card Facing Page 69

Conveyor Corners

Materials round corners as easily as moving in a straight line with a new 90-deg corner produced by Stewart-Glapat Corp. A series of narrow belts running in grooved pulleys meet to provide an angular flow. Belts are

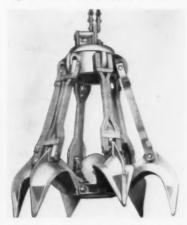


banked for constant contact with material in motion and positive belt guides prevent side sheer as the material changes direction. A slight differential in speed between the bank of belts produces a positive turning action. Belts are spaced to carry small, large, long, and flexible products as well as standard packages. Parallel conveyor lines can be mounted side by side without space-consuming radius turns.

Circle 109 on Card Facing Page 69

Series of Grapples

Ruhr Industries have announced a new grapple, Model M-1. Produced with five, six, or eight tines, depending on size of the grapple, it features



vertical slideways with barrel-type bushings for maximum vertical and angular tine movement; one piece top head; rigid arms; and rocking sheave blocks at top and bottom. It is available in sizes from .33 to 3.3 cu yd.

Circle 110 on Card Facing Page 69

Powered Platform Truck

New to industry is a platform truck designed to handle heavy loads in close quarters. Jointed between the platform and power unit, it gives the effect of four-wheel steering. By pivoting in the middle, it is both maneuverable and fast for horizontal



materials handling. The heart of the truck, made by Erickson Power Lift Trucks, Inc., is the articulated joint between the drive unit and the platform. This eliminates conventional steering parts which require more servicing due to wear. Platform beds, which are 10 ft long or longer, rise vertically without swinging up or tilting back. Capacities range from 7000 to 15,000 lb.

Circle 111 on Card Facing Page 69

Pre-Joined Container

A fully collapsible hardwood plywood shipping container with flexibly pre-joined sides to permit fast assembly has been developed by Atlas Plywood Corp. It is stored flat but opens into a square tube when ready for use. The product is bolted to the base after which the tube is mounted and the top set in place. Stacking strength, light weight, and high impact resistance are features of the container.

Circle 112 on Card Facing Page 69

New Pallet Roller

The Frank L. Robinson Co. is producing a newly designed Ace pallet roller featuring full pressure lubrication. This lubrication to the bearings is accomplished through a grease fit-



ting at the end of each axle. The hexagon axle is drilled only to the ball bearing itself, leaving the load bearing area solid. The roller also features a frame of high tensile strength steel, fully welded.

Circle 113 on Card Facing Page 69 (Please Turn Page)



Hand Truck Series

A new series of light-weight, all magnesium hand trucks has been announced by **The Colson Corp.** Now available in four models, the trucks



carry up to 450 lb. They weigh about 16 lb and roll easily on 6 and 8-in. ball bearing wheels equipped with semi-pneumatic balloon tires. There are no castings or welds to break.

Circle 114 on Card Facing Page 69

Light-Weight Conveyor

A new light-weight conveyor, being introduced by the Hytrol Conveyor Co., is available with hinged mounting brackets. These permit the Handy-Boy to be attached to the wall of a staircase. When not in use it can be tipped



on its side permitting free access to

The conveyor has a bed of heavy-gage, heat treated aluminum; reversible movement of adjustable tension belt; and a full complement of wheel, stand and feeder attachments.

Circle 115 on Card Facing Page 69

Telescopic Conveyor

Bag-packed materials and similar commodities not suited to gravity systems, are readily handled by a new telescopic belt conveyor. Goods are transported in either direction. The telescopic feature permits the conveyor to follow the load. Manufactured by the Wilkie Co., it is sup-



plied in two, three, or four sections. Each section may be 10, 12, 14, or 16 ft long. Belt widths are 10, 20, or 30 in. The belt on each section is driven by a separate motor. The conveyor itself is mobile and telescopes by power drive. Loads up to 300 lb per lineal foot are handled. Differences in level between loading dock and trailer bed are automatically accommodated.

Circle 116 on Card Facing Page 69

Differential Hoist

A new, lightweight differential hoist developed by Thern Machine Co. reduces the pull necessary to operate by using a new bearing design in



the lower sheave. Anti-friction needle bearings are used. Weighing only 29 lb, it has a capacity of 1000 lb. Every part is 100 per cent rust-resistant.

Circle 117 on Card Facing Page 69

Powered Walkie Tractor

A new heavy-duty push-pull walkie tractor rated at draw bar pull of 2800 lb has been developed by The Moto-Truc Co. Electrically operated, the tractor pulls heavy loads while retaining the small size and maneuverability of the walkie style. It will



make a full 180-deg turn without scuffing or scraping tires. Over-all dimensions are 37 in. wide and 55 in. long. It weighs 2500 lb without the battery. Conventional walkie controls provide two speeds foward and reverse. A safety spring on the steering handle shuts off power and applies the break when the handle is released.

Circle 118 on Card Facing Page 69

Tarpaulin Material

An improved Fairprene tarpaulin material providing greatly improved abrasion resistance is being offered by the DuPont Co. Fabrics Div. The new addition to neoprene coated fabrics uses a coating of synthetic rubber on the underside. Tarpaulins of this material can be stored wet without damage. They remain pliable in sub-freezing temperatures.

Circle 119 on Card Facing Page 69

Oscillating Conveyor Line

Link-Belt Co. has added a third size range to its oscillating conveyor systems for bulk materials handling applications. Known as the Coilmount,

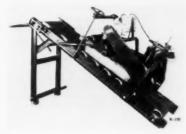


it is designed to augment equipment of lighter and heavier capacities already on the market. It is the same as earlier models except that the trough is supported by cast aluminum rocker legs and coil springs. Motion is imparted to material to be carried by means of a constant-stroke eccentric drive. Coilmount is available from stock in fully assembled sections of 5 to 10-ft lengths, 10 and 20-in. widths, and 10-gage or 3/16-in. trough thickness. Sections can be assembled in lengths up to 100 ft.

Circle 120 on Card Facing Page 69

Belt Type Bag Flattener

A new heavy-duty bag flattener using power-driven condersite covered rolls and rough top belting has been developed by Flexoveyor Mfg. Co. The standard unit is 24 in. wide with 6 ft 8-in centers. It is powered by a



1½-hp gearmotor. It can be furnished in horizontal models for floor mounting, with castors for portability, or inclined up to 35 deg. The flattener produces neat, well-formed bags that are easier to handle and conserve shipping space.

Circle 121 on Card Facing Page 69

Engine-Generator Lift Truck

Narrow aisle handling, steep ramp climbs, and long runs are made possible through the introduction by The Yale and Towne Mfg. Co. of a standup fork lift powered with an enginegenerator unit. The engine-generator provides a constant power supply per-



mitting steady full shift operation where above-normal ampere draw is required. The unit fits into a medium size battery compartment, sacrificing none of the truck's narrow aisle ability. Engine generator units can be used on any of the models in the Warehouser line, stacker, platform or Extend-A-Forks.

Circle 122 on Card Facing Page 69

Vacuum Lift Plate

A new vacuum-lifting device, known as the Air-Lift, has been announced by International Staple and Machine Co. Ideal for lifting and moving all kinds of bulky, hard-to-handle materials (such as sheet metal, glass, plaster board, plywood, etc.), the Air-Lift is a portable hand model capable of lifting up to 200 lb. A vacuum is created as soon as the Air-Lift is placed on an object, and remains effec-



tively sealed by means of a special neoprene gasket. To release the object, the operator simply presses a release valve with his thumb—the air rushes in, the vacuum is broken, and the object is immediately released.

Circle 123 on Card Facing Page 69

15-Ton Mobile Crane

Announcement of a new crane, S-1510, has been made by Coles Cranes, Inc. Designed to lift 15 tons



at 10-ft radius with a 30-ft boom, the mobile crane is available with gasoline or diesel-electric power to eliminate clutches and reduce maintenance and operational costs.

Circle 124 on Card Facing Page 69

Light Ramp-Dockboard

A new all-magnesium combination ramp-dock board, built in two detachable sections, is available from Lite-Line Industries Div., Copperloy Corp. It is recommended for use where a long approach is needed to compensate for large height differentials between the dock and the carrier floor. It is also recommended for jobs where low underclearance problems require a long, gentle slope. Light weight and

two-part design make it possible for one man to move and position the



combination. It consists of a ramp section which is permanently elevated on one end and a standard dock board. Circle 125 on Card Facing Page 69

New Wheel Design

Molded plastic wheels in many new sizes and capacities are offered by The Hamilton Caster and Mfg, Co. They are made of macerated heavy weave canvas duck, impregnated with phenolic resin compounds and



molded under extreme heat and pressure. This material resists corrosion from mild acids, oils, and greases. The wheels are floor protective under extreme loads. Noise is reduced. Sizes range from 3¼ in. to 12 in. in diameter. Load capacities are from 300 to 3000 lbs.

Circle 126 on Card Facing Page 69

Barrel Cradle Truck

A barrel cradle truck with curved top rails to hold a barrel firmly in position has just been introduced by the Morse Mfg. Co. Two other safety



features are non-skid devices, located directly in front of the front wheels on the rocker, and a safety catch on the nose piece. It has an 18-in, wheel base. Height to the bung of the barrel is 22 in.

Circle 127 on Card Facing Page 69



LITERATURE

Inland Waterway Guide

A book of general information about U. S. river highways and a reference manual for a wide variety of barges has been prepared by the Union Barge Line Corp. A mileage chart for the Mississippi River System and maps of the area it serves are featured.

Circle 128 on Card Facing Page 69

Radio Telephone System

A low cost radio telephone system, the IMP, is described in a new publication by Kaar Engineering Corp. Initial cost is discussed in terms of return of investment through new vehicle efficiency.

Circle 129 on Card Facing Page 69

College Courses Surveyed

The College-Industry Committee on Material Handling Education of The Material Handling Institute, Inc., has compiled a survey of courses and conferences offered by colleges and universities this year. Included in the survey are courses offered, conferences, research projects underway, and schools interested in research programs.

Circle 130 on Card Facing Page 69

Conveyor-Drive Catalog

The American Pulley Co. has announced a catalog covering its new line of speed reducers for screw conveyor applications. This new catalog gives directions and tables by which a complete drive can be designed in a matter of minutes. Units discussed have reduction ratios of 5 to 1, 13 to 1, and 20 to 1.

Circle 131 on Card Facing Page 69

Overhead Door Catalog

Overhead doors, electric door operators, and radio controls are listed in the new catalog of Barber-Colman Co. The Book gives full information on new flush sections, combining high-insulation-value sandwich construction with weatherproof facing. Specifications and instructions for preparing building openings and installation of various models are given with detail drawings.

Circle 132 on Card Facing Page 69

Fire Extinguisher Chart

A new chart, "How to Select a Fire Extinguisher," is available from the Fire Equipment Mfr's. Assn., Inc. It lists basic types of extinguishers and shows at a glance which to use against the three classes of fire. The effects of temperature, the operating ranges for each type of extinguisher, how the various extinguishing agents kill fire, and other information are listed.

Circle 133 on Card Facing Page 69

Hand Lift Truck Book

"Mechanical and Hydraulic Hand Lift Trucks" is the title of a new 16-page basic book on the selection and use of hand lift trucks. It is published by the Assn. of Lift Truck and Portable Elevator Mfrs. Schematic diagrams show how the single-stroke mechanical, multi-stroke mechanical, and the hydraulic hand lift trucks operate.

Circle 134 on Card Facing Page 69

Corrugated Shipping Boxes

Hinde & Dauch is offering No. 8 in the Little Packaging Library "How To Engineer Corrugated Shipping Boxes." It lists important considerations preliminary to the engineering of a new box. Photographs illustrate the various stages in box development and show examples of properly-engineered shipping boxes.

Circle 135 on Card Facing Page 69

FILMS

Straddle Carrier Delivery

How a building supply dealer saves money and builds customer service by using a straddle carrier to deliver bricks directly to the construction area is the subject of "Job Site Delivery," a 12-minute, color, silent movie.

Filmed on location in Jacksonville, Fla., the movie illustrates how the straddle carrier loads and unloads itself in seconds and shows how fourwheel drive enables it to drive through mud and sand.

The film is available from Ross Carrier Div., Clark Equipment Co., P. O. Box 358, Benton Harbor, Mich. Circle 136 on Card Facing Page 69

New Power Unit Folder

International Harvester Co. has made available an eight-page booklet on its line of 16 power units. The folder depicts widespread use of IH power. On-the-job photos display the units as propelling components of such machines as packing plant compressor and tugboat drive unit.

Circle 137 on Card Facing Page 69

Two Catalogs on Doors

Clark Door Co. has just issued two new catalogs describing its line of automatic door equipment. One covers electric industrial door units and fire door operators. The second deals with cold storage door assemblies. Both contain photographs, drawings, and suggested specifications.

Circle 138 on Card Facing Page 69

Canvas Belting Conveyors

A catalog and engineering handbook on stitched canvas belting for conveyors, elevators, and power transmissions has been prepared by Imperial Belting Co. Technical data deals with belt tension, safe working loads, pulley diameter and maintenance.

Circle 139 on Card Facing Page 69

Materials Handling Study

A plan aimed at reducing materials handling costs in motor freight, railroad, airline, and marine transportation industries has been introduced by Lewis-Shepard Products, Inc. Called the Master Plan, it is a free, complete application engineering service. The first step in the plan is for an installation engineer to survey the present terminal. This information is then subjected to a complete analysis. Procedures as well as equipment are evaluated.

Circle 140 on Card Facing Page 69

Wire Partition Bulletin

An economical approach to plant layout problems is described in a new eight-page bulletin on partitions and custom enclosures. It is prepared by Wire and Iron Products, Inc. The partitions use interchangeable panels which can be assembled and installed by plant workmen. The panels are reusable and can be relocated as layout changes require. An easy-reference table is included.

Circle 141 on Card Facing Page 69

Light Ratchet Hoist

The Yale & Towne Mfg. Co. has published a new catalog covering its lines of roller chain and link chain Pul-Lifts. These lightweight ratchet hoists are produced in capacities from ¾ ton to 15 tons.

Circle 142 on Card Facing Page 69

Bushed Roller Chain

Link-Belt Co. is offering a new book featuring bushed roller chain for conveyors and power transmission. Nineteen sizes of offset sidebar chains for power transmission applications are available. For conveyor service, a total of 14 straight sidebar chains are available.

Circle 143 on Card Facing Page 69

Multi-Purpose Truck

A truck which changes from hand truck to platform truck or dolly without use of tools has been introduced in a new leaflet by the Four-Way Duty Truck Co. It carries up to half a ton.

Circle 144 on Card Facing Page 69

Engine Specifications

Hall-Scott, Inc. is offering specification sheets on several new truck engines. Three butane-propane straight six models have horsepower ratings of 256, 342, and 368. A straight six gasoline engine included in the group is rated at 239. Drawings with dimensions of each engine are included.

Circle 145 on Card Facing Page 69

New Fork Lift Truck

Operating and maintenance features, specifications, and dimensions of the new Clarklift-40 fork truck of 4000-lb capacity are contained in a four-color, six-page brochure available from the Industrial Truck Div., Clark Equipment Co. Innovations are a swing-back hood, self-adjusting brake, adjustable upright assembly, and quickly removable counterweight. Circle 146 on Card Facing Page 69

Single Drum Portable Hoist

A new 12-page booklet on a single drum multi-purpose portable hoist has been published by the Joy Mfg. Co. Air, electric, and gasoline driven models are presented. Sizes range from 0.9 to 15 hp.

Circle 147 on Card Facing Page 69

Clamping Attachments

A new line of clamping attachments for Allis-Chalmers lift trucks are introduced in a catalog offered by the Buda Div. Photographs of the clamps, side-shifting clamps, rotators and rotating clamps are included.

Circle 148 on Card Facing Page 69

Safe Truck Manual

"Safety Is Our Business" is a new manual of safe practices for truck operators announced by The White Motor Co. Published by the Service Divafter two years of research, the manual directs latest information on safe practices to operators, drivers, and mechanics. It emphasizes preventive safety maintenance and features a series of bulletins to be issued at regular intervals calling attention to various safety developments.

Circle 149 on Card Facing Page 69

Protection for Docks

Frommelt Industries describes its Car-Dox retractable all-weather dock protectors in a recent publication. The fabric covers can be used with either rail cars or trucks. They speed loading and unloading in inclement weather.

Circle 150 on Card Facing Page 69

ROOKS

Guide to Conveyor Standards

The guide to standards for conveyors as approved by the American Standards Assn. is now "Conveyor Terms and Definitions," the industry dictionary published by the Conveyor Equipment Mfrs. Assn.

The 64-page dictionary was first published in 1952. There are, according to R. C. Sollenberger, CEMA executive vice president, about 25,000 copies in use. It defines nearly 1500 terms applied to conveyors and conveyor equipment. Nearly a hundred line drawings are used.

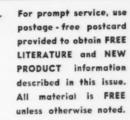
Copies of "Conveyor Terms and Definitions" have been placed in American Standards Assn. libraries throughout the world. Conveyor manufacturers are providing copies to state safety officials to help overcome confusion as to safety provisions that are applied to conveyors.

Copies are available at \$1 each from Conveyor Equipment Manufacturers Assn., 1 Thomas Circle, Washington 5, D. C.

Case-Liner Testing

Results of tests conducted by the U. S. Dept of Agriculture are included in a new book, "Development of A Case Liner for Long-Term Outdoor Storage." Written by C. E. Hrubesky, R. A. Aubey, and A. Hyttinen, it reports on tests made on barrier materials to determine their effectiveness as case liners to protect goods stored outdoors in boxes.

Copies of the 33-page book are available at \$1 by ordering PB 111916 from OTS, U. S. Dept. of Commerce, Washington 25.



Light Delivery Body

More payload through a lightweight delivery body is the story of the magnesium - reinforced fiberglass plastic body produced by **Boyertown Auto Body Works**. The body shell, weighing 844 !b., is combined with a typical chassis in this sample application.

Circle 151 on Card Facing Page 69

Bulk Handling System

Cutting materials handling costs through use of Vacu-Veyor on bulk materials is discussed in a new bulletin prepared by Vacu-Blast Co., Inc. A pneumatic, vacuum action is used in this system to empty cars and trucks. It can be adapted to any kind of a bulk carrier unloading operation.

Circle 152 on Card Facing Page 69

Insulated Truck Doors

DeKalb Commercial Body Corp. is producing a partition door for refrigerated truck bodies. Operating on a top track, the "Swing-Away Slide" door has no bottom track to clog and its gasket does not rub the partition in opening or closing.

Circle 153 on Card Facing Page 69

Wooden Box Specifications

The Nailed Wooden Box Assn. has prepared a pamphlet, "Specifications for Nailed Wooden Boxes," containing a number of helpful tables on nail types and minimum wood thicknesses.

Circle 154 on Card Facing Page 69

Conveyor Lubricators

New Automatic Conveyor Lubricators are introduced in an eight-page catalog released by J. N. Fauver Co., Inc. Along with the illustration of each model is a discussion of its advantages, purpose, operation, and construction.

Circle 155 on Card Facing Page 69

Dock Bumper Line

Flex-O Rubber Dock Bumpers are illustrated and described in a new publication by **Bumpers**, Inc. The bumpers are designed to protect docks and trucks.

Circle 156 on Card Facing Page 69

Working Words of the Railroads

EOPLE who work together tend to develop a special language, a colorful group of words to express the way they think and feel about their common occupation

Railroading-because it has captured the imaginations of men as few other occupations have in the past 100 years—is a particularly rich source of expressive language.

England built the first railroads. but America was soon outstripping her in the creation of colorful railroad slang. By the 1830's we had changed the English "plough" to "cowcatcher" and "crossing plate" to "frog."

Then we opened the throttle and roared along the newly-built American main line, tossing off terms almost as freely as cinders. All of them are commonplace now, and their meaning is familiar to all Americans, but the majority of them would puzzle an Englishman. to whom a baggage car is a "lug-

RAILROAD SLANG

Railroad "slanguage," like a woman. is often a thing of beauty and a joy forever, in addition to being changeable. Therefore, to initiate the new and bring the nostalgia to the old railroaders, we offer the following dictionary of railroading terms. The old timers will tell you that we haven't even scratched the surface.

Air Monkey--An air-brake man

Alley—A clear yard track
Anchor, Anchor 'Em, Tie 'Em Down, Tie
The Train Down—To set the hand

Animal Car. Crumb Box, Crummy, Dog-

house—Caboose
Baggage-Smasher—Baggage man
Ball The Jack, Beat 'Er On The Back,
Carry The Mail, Drop 'Er Down In
The Corner—Put on speed
Barn, House—Roundhouse Er Down In

Beehive. Knowledge Box-Yardmaster's

Bell Ringer, Tallow Pot-Fireman

Bid In A Run-To choose the run he is going to work when they are put up for

Big Hole—Brake emergency position Big O, Big Ox, Boss, Brains, Brass Buttons—Conductor Big O, Buttons

Blind Baggage-Front platform of a baggage car

Blind Gaskets, String of Flats-Hot cakes dine

Boiler, Calliope, Hog, Iron Horse, Kettle, Mill, Pig. Pot. Power, Stove, Teakettle, Teapot—Locomotive

Boiler Handle, Latch-Throttle Bookkeeper-Rear brakeman Boomer-Migratory railroad worker Brains-Train dispatcher

Brakie, Shack-Brakeman Brass Collar-Railway official

Pounder. Brass Lightning Slinger—Tele-graph operator Bridge Monkey-Worke ker on ee construction

the Board -One without a regular run Bunkhouse -

Freight car filled with bunks Bump-To take another's turn

Butcher, Butch-Trainboy Tie the train down.



Cow Cage

neer's signal to lower the sema-phore arm Cannon Ball—Fast train Can, Oilean, Tank

Call For The Board-The engi-

-Tank car Car Hand, Railrainman Knocker—Car inspector and re-

pairer Cinder Cruncher—
Switchman
Clip—A note or

Club 'Em Down-To set the hand brakes with aid of sticks Coon a Train, Go High—To go over the freight cars

Cornfield Meet-Headon collision Cow Cage, Stock-Stock car Crow's Nest-Lookout box on the caboose Decorate-To ride on top of a train

Dog Catchers—Crew sent to relieve a crew that has been "outlawed"

Double-Header—Train with two engines

attached
Drug, Pike—Railroad
Drill, Gost—Switch engine
Engle-Eye, Grunt, Hogger, Hoghead—
Engineer

Field. Garden-Railway yard Filling Station.—Water tank
Filling Station, Jerkwater Town.—Small
station or town

Flat-Flatcar Foam, Raise Water-To carry water with

live steam to the cylinders

Fog Up—Produce steam

Freezer, Icer, Reefer—Refrigerator car Fumbling The Hoop—Missing the hoop upon which orders are attached G.Y.M., Gym—General yardmaster

Gandy Dancer, Snipe—Section hand Gandy Gang, Snipes—Section gang Gaskets—Doughnuts Gate, Rail Bender-Switch

Go In The Hole, Head In-Sidetrack Grab-Iron-Handrail Gravy Train-Easy

Grease Monkey-Car and locomotive

greaser Greaseball - Me-

Green Carrier-First section of a train Harness - Passenger conductor's uniform

Hay Burner-Oil lantern Head Man-Front brakeman

Whiskers

Herd The Pig—Of a yard switchman to follow the engine
Herder—Couples and uncouples the loco-

High Iron, Highline-Main track

High Iron, Highline—Main track Hitch or Hook Up, Make a Hitch, Tie Ou —To couple an engine to a car Hogback—Top of a hill Hog Law—The 16-hour working-day law

Hook, Big Hook—Wrecking car Horse 'Er Over—Go into reverse in order to make a quick stop

Horse 'Er Over-Reverse the engine Jam Buster-Assistant yardmaster Juckey—Yard switchman who rides cars Juice, Soup—Water King Snipe, Push-Section boss

Lap Order-A mistake in train orders Long Whiskers-Long seniority Make On The Fly-Board a moving train Master Maniac—Master mechanic

Master Mind. Ringmaster—Yardmaster Mudhop, Number Grabber-Yard clerk No-Bill-Car without a bill of lading Old Head, Whiskers-Old hand

On The Ties-Derailed To hook on cars at a station Pin Puller-Switchman who couples and

uncouples cars Pink—A rush te rush telegram Possum Belly-Tool or supply box under

Pull Your Freight Out-Leave, go away

Punk-Call boy Rails-Railroad employes Rat Hole—Fire door Rattler—Freight train Rule G—Thou shalt not drink Sag-Bottom of a downgrade

Scoop—Step at the front end of a yard engine
Shiner—Signal lantern

Show A White Feather—To release a whisp of steam from the safety valve Shuffle The Deck, Shake Em Out—To switch cars
Side Door Pullman—Boxcar Smash Baggage-Handle baggage

Special Agent-Railway detective Swingman-Switchman who couples and uncouples cars

Take The Slack—To reverse the engine before starting forward The Brass—Bell

The Cushions, The Plush-Passenger

The Iron, The Rust, The Steel—Tracks The Set-Out—Cars left on a siding Thousand-Miler-Dark work shirt Tie Up, Unload-Go off duty Tie Train Down-To set the hand brakes

Tour, Trick-Work shift Train Line-Air-brake line Whistle Off-To sound the departure whistle

Yard Geese-Yardmen

By R. G. Ottman

From Southern Pacific Bulletin

gage van," a freight car is a "goods wagon" and switches are "points."

The late H. L. Mencken, author of The American Language, from which much of this information was taken, said in 1948 that the English have begun to use "freight" in our sense, although they prefer to restrict it to waterborne traffic, and they have borrowed Pullman, ballast and track, and have begun to abandon "left luggage room" in favor of "cloak room," but they still get "in" or "out" of a train, not "on" or "off." An English "guard" (not conductor) does not bellow "All aboard!" but "Take your seats, please." The word "railroad" itself is, to all intents and purposes, an Americanism; it has been little used in England for 50 years.

The standard terms of the railroad business have long since passed into the dictionaries, and many of them appear in our everyday figures of speech. We are all familiar with "single track mind," "to jump the rails," "to collide head-on," "tank town," and "broad gauge man," for example.

There remains a large body of slang, however, that is not as generally understood. Chiefly the language of operating men, these words and phrases, are unintelligible to large numbers of non-operating railroaders.

On Southern Pacific, this latter group constitutes about 80 per cent of the total number of employes, and it is to them that we dedicate the accompanying "dictionary" of railroad slang.

Using the list, they will be able to translate such sentences as, "The hoghead went down to the cow cage with a bunch of yard geese to find out what the big ox wanted."*

There will be plenty of mystery left, however, since this list only scratches the surface, and American railroad slang still is "high-balling" along.•



The gypsum industry recommends more 15-ft openings and 50-ft cars, with the extra wide center-located openings on both sides of the boxcar

Traffic Men Suggest Ideal Boxcar

Study conducted by Gypsum Association Traffic Committee lists railroad boxcar shortcomings, suggests improvement plan

THE railroad boxcar, major distribution vehicle of the gypsum industry, has undergone exhaustive study by members of Gypsum Association Traffic Committee. The Committee objective was to determine the "ideal boxcar" practical for standard general use equipment.

It was noted that railway cars are long-life equipment and are in service 25 to 30 years. Those being ordered now, the Committee declared, generally are antiquated from design standpoint for today's use.

The traffic men pointed out the following deficiencies in cars they are loading daily together with their recommendations:

1. There are proportionately

too few double- or wide-door cars (over 8-ft opening) both in 40- and 50-ft lengths. The study recommends that double-door openings be not less than 15 ft. If more economical to construct, 15 ft single - door openings are equally advantageous.

The Committee declared there would be a further advantage in loading cars to have openings center-located, rather than staggered as at present.

Current staggering is said to present an obstacle to the great amount of freight loaded through one boxcar to another, and, particularly, to use of fork truck equipment with wide lading.

2. There are too few 50-ft (Please Turn to Page 97)

[&]quot;The engineer went down to the stock car with some switchmen to find out what the conductor wanted."

Only New HALLOWELL ERECTOMATIC. Steel Shelving

has a time-saving, positive built-in lock—plus these features:







FAST ASSEMBLY. Just position the shelf supports, insert the shelf, press the locks. Straight-in, straight-out shelf change. No tilting. No dismantling. No interference with any other shelf.

New Hallowell ERECTOMATIC® steel shelving goes up fast, can be rearranged in seconds. It's the unique built-in locking device* that cuts assembly time, speeds repositioning of shelves. Here's how easy it is! To position a shelf—slide it into place on the shelf supports, press the locks, and the job is done. To reposition a shelf—release the locks, pull the shelf straight out, slide it straight in on the supports at its new location, and press the locks. It takes only seconds to complete the move.

New Hallowell ERECTOMATIC steel shelving is available in all types, too. Open, closed, bin units, ledge units, counter units, and cabinets are made of prime steel, phosphate coated, and finished in baked-on enamel. Standard is SPS green, other colors are available.

Investigate new Hallowell ERECTOMATIC before ordering shelving. You'll find it stocked by leading industrial distributors and shop equipment dealers everywhere. Contact the one nearest you. Or write Hallowell Shop Equipment Division, STANDARD PRESSED STEEL Co., Jenkintown 77, Pa.



INDEPENDENT SHELF POSITIONING. Each shelf can be individually repositioned in seconds.



FULL USE OF SHELF AREA. No tees or angles, and beaded posts save valuable space.

*Patent applied for

SEE US AT THE MATERIALS HANDLING EXFOSITION IN PHILADELPHIA,
CONVENTION HALL—APRIL 29—MAY 3. WE'LL BE AT BOOTH 1147.



QUICK SHELF CHANGE. Release the locks, remove the shelf and its supports, relocate, and press the locks.



common side Panels and Posts save material between adjacent units in rack. Back and side panels are one-piece.



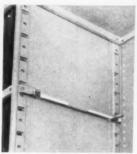
BEADED POSTS AND FLANGED SHELVES prevent snagging of clothing or stored goods, protect workers.



SHOP EQUIPMENT DIVISION

STANDARD PRESSED STEEL CO.





FULL DEPTH SHELF SUPPORT. No buckling possible. Reinforcements can be added when they are required.



4 CLASSES OF SHELVES. Regular, medium, heavy and extraheavy construction meets all load requirements.

Circle No. 13 on Card, Facing Page 69, for more information

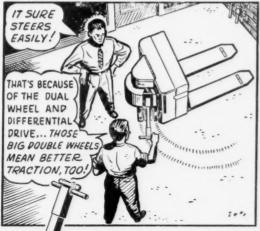
REVOLVATOR
GO-GETTER
The MOST COPIED
LIFT TRUCK
On The Market



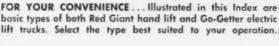
THE LIFT & LOWER SWITCH IS RIGHT UNDER MY FINGER TIPS - AND THIS SINGLE THUMB-BAR SWITCH CONTROLS BOTH BRAKES, AS WELL AS TWO SPEEDS AND FREE-WHEELING IN BOTH DIRECTIONS, REGARDLESS

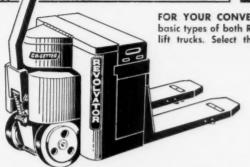












REVOLVATOR CO.

8796 TONNELE AVE., NORTH BERGEN, N. J.

Gentlemen:

Please send me without obligation, your Truck Index of over 600 combinations of sizes and capacities.

NAME

COMPANY____

ADDRESS

CITY____ZONE___

Circle No. 14 on Card, Facing Page 69, for more information

DEPT. 96

5 full working days of materials handling...

The MATIONAL MATIONAL MATERIALS HANDLING

EXPOSIT

and CONFERENCE



An outstanding industrial conference sponsored by the American Material Handling Society... down-to-work sessions that hit at the practical aspects of materials handling problems in your plant.

Plan now to attend! Write for free exposition cards and information about the conference to:

MATERIALS HANDLING EXPOSITION

CLAPP & POLIAK, INC., Management

341 Madison Avenue New York 17, New York MUrray Hill 4-3432

Convention Hall, Philadelphia, April 29-May 3, 1957

The BIG Show... aisle after aisle of machines, equipment, supplies and services ... exhibits of the leading manufacturers ... showing you a better and less costly way of moving it.

The BALANCED Show...everything in materials handling...from heavy giants to the simplest devices . . . numerous active demonstrations . . . all headlined to make your plant operation more efficient and less costly.

The COMPLETE Show... where you can go to buy or go to browse... where you'll see how others solved problems... talk to experts... pick up scores of ideas.

DA Materials Handling Primer-XIX

Work Areas-Yards and Platforms

By D. O. HAYNES

NA Metacolo Hardless Consultant

YARDS AND YARD EQUIPMENT

Open areas referred to as yards are the scenes of many handling activities. These activities include storage of various materials, loading and unloading cars, and the flow of traffic from one plant to another. Some of these activities are illustrated in Fig. 1. Bulk materials, lumber, lengths of pipe, reinforcing bars, rolls of wire fencing, structural shapes, and other articles not damaged by exposure are stored in yards. Retailers in such industries as coal and lumber operate yards. Also, yards usually are located near railroads and marine terminals.

RUNNING SURFACES

Where mobile equipment is operated, yards normally have surfaces suited to vehicular travel. However, there is considerable difference in the tractive effort required to move equipment over different running surfaces.

Table I gives the resistance in pounds per ton of gross weight of machine plus load. The table illus-

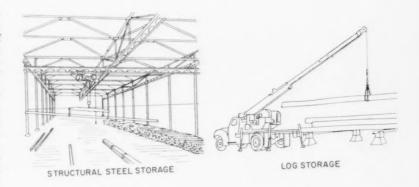


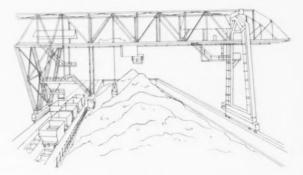
Runway Surface	Resistance (1b per ton
Asphalt, hard	28
Brick, smooth	40
Brick, poor	57
Concrete, good	36
Concrete, poor	53
Gravel road	75
Macadam, good	47
Macadam, poor	75
Sand	275
Sand, loose—3 in.	330
Snow, hard	50
Snow, soft	66
Snow and ice	40
Wood block	40
Wood planking	43
Wood planking, sticky	47

*Values based on antifriction bearings.

Sources: Army Technical Service Command (ATSC Manual No. 67-9) and Material-Handling Handbook, Industrial Truck Association.

trates comparative resistances. Grades encountered, as shown in Fig. 2, also





BULK STORAGE BY GANTRY CRANE



TWO MOBILE MACHINES WORKING AS A TEAM

FIG. 1—YARDS PRESENT MANY DIVERSE PROBLEMS

EDITOR'S NOTE: This series of copyrighted articles is being excerpted from a forthcoming book by the author. The editors of DISTRIBUTION AGE gratefully acknowledge the privilege of exclusive prepublication magazine rights.

FIG. 2-DIAGRAM ILLUSTRATING PER CENT OF GRADE

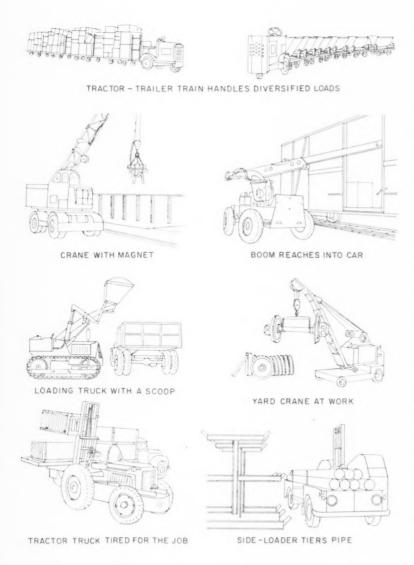


FIG. 3-MISCELLANEOUS HANDLING JOBS IN YARDS

must be taken into account. On upgrades the resistance is increased by 20 lb per ton of gross weight for each 1 per cent of grade. On downgrades, the grade resistance is subtracted from the tractive resistance.

Figures given here must be increased if the surface of the roadway is in poor condition. Large cracks, holes, irregular rail crossings, and similar faults should be corrected. Good running surfaces reduce power requirements and damage to machines and loads.

TYPES OF EQUIPMENT

No such problems are involved where overhead-traveling cranes are installed, as shown in Fig. 1. Such machines frequently serve double duty. However, mobile equipment provides considerably more flexiblity in yard operations.

Industrial railroads are utilized in some plant yards to move items between buildings and for the disposal of refuse. On marine wharves they carry freight between ships and distant storage areas.

The trackless trains shown in Fig. 3, because they do not have to follow a fixed path, are more satisfactory for some operations. They are particularly valuable when the train is made up at separated points, or cars are to be dropped off at different spots. Switching is avoided and the tracks are not blocked while the train is being assembled, broken up, or just waiting.

Mobile cranes can be mounted on crawlers where yard conditions are not favorable to tire-mounted equipment. Scoop trucks are effective means of loading or moving bulk materials. High-lift fork truck; have introduced new techniques for handling pipe lengths, lumber, and other long articles. They frequently are teamed up with an end-loader, as shown in Fig. 1. The end-loader does the hauling, while the fork truck tiers.

Side-loaders, shown in Fig. 3, tier load within the reach of their forks or auxiliary cranes. They can place long articles on racks, two load lengths in depth, by working from two aisles.

In addition to the examples of handling equipment shown here, the reader should refer to previous articles where the handling of specific commodities was detailed.

PLATFORMS

Known variously as shipping platforms, loading docks, receiving areas, and other combinations of these terms, these are the prescribed locations where goods are received or dispatched from plants and warehouses. As a group, they lack common characteristics. Some are low, wooden affairs, raising scarcely above ground level. Others are well constructed for handling purposes. Some have their front edges at the building line so that the active area is within the building proper. Finally, there may be no structure at all, or at best a portable platform, as in some Western states where the main floor of the plant is at ground level. Several platforms are shown in Fig. 4.

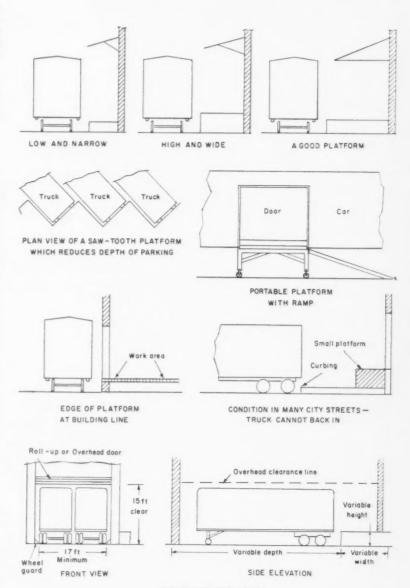
Many platforms of old buildings are totally inadequate for present-day handling equipment and methods. This is true because architects of a few years ago could not foresee the radical changes which have taken place in the last quarter century.

SELECTING A PLATFORM

The first consideration in selecting a platform is the type of carrier to be served. Most plants and warehouses receive and ship by rail, truck, or both. Marine terminals are not included here because operations in connection with cargo-handling are discussed in a later installment. Platforms at railside run parallel with the tracks. Most truck platforms are so arranged that the vehicles back in. In some instances trucks may be loaded and unloaded through side doors.

Certain dimensions of rail freight platforms are extremely important in their effects on handling. This is illustrated in Fig. 5. The height of edge of the platform above the top of the rails is especially important. It should be correlated with the type of car or cars to be served. Unfortunately,

PLATFORMS AS WORK AREAS



A TWO - WAY TRUCK BAY: A MODERN TREND IN METROPOLITAN BUILDINGS

FIG. 4—MANY PLATFORMS PRESENT TOUGH HANDLING PROBLEMS

no fixed standard exists for the height of a car floor above track level.

Box, automobile, flat, and gondola cars vary in this regard from 43 to 47 in. The racks on the floors of refrigerator cars may be as high as 66 in. above the track. A height of $47\frac{1}{2}$ in., as recommended by the railroads, is not mandatory and can be varied to meet particular requirements. Where a compromise must be made, the best arrangement is to have the

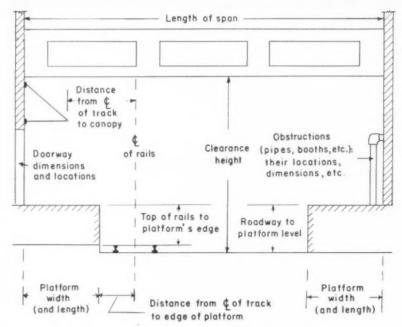


FIG. 5—CRITICAL DIMENSIONS FOR RAIL AND TRUCK PLATFORMS

dock level lower than the floors of the cars to be served. This permits dock boards to slant up into, rather than down into the car. This saves space within the car where every square inch counts for maneuvering equip-

A second critical dimension is the distance between the center line of the track and the edge of the platform. This determines the amount of open space or gap between the side of the car and the platform. Cars vary in width from 123 to 125 in. The center-line dimension recommended by the railroads is 68 in. which results in a gap of between 4 and 51/2 in. A greater gap occurs between refrigerated cars and the platforms because the floor racks usually are set inboard to permit insulated doors to be closed properly. A longer dock board is required to bridge the gap with these cars.

For safety reasons, railroads have established certain minimum clearances between the car and the building or an overhead canopy. This also is illustrated in Fig. 5. In planning a new facility or in making alterations to an old one, approval of the line which provides the spur must be secured.

WORKING WIDTH

The clear working width of the platform—the width exclusive of losses due to fixtures such as pipes, checker's booths, etc.—has become increasingly important with changes in car loading and unloading equipment. Where necessary, provision must be made for two-way traffic, space taken over by dockboards, possible storage of pallets, etc. The safest procedure is to make a large-scaled drawing of the old or proposed platform and, with templates of machines and accessories, test various widths until the best one for the given situation is found.

When the platform is within the building line the question of width usually is not serious because the work area is more apt to be ample. However, the locations of the doors opening through the building to the cars can cause trouble unless properly placed. When the openings are not exactly opposite the doors of the cars, time is lost in spotting the cars.

TRUCK DOCKS

In general, the same broad principles apply to the design and construction of truck docks as to rail facilities. Again, the problem is complicated by lack of standards for height of trucks above road level. Where trucks of differing bed heights are handled, the practice is to make the platform, if it has an adjustable dock board, 52 in. high. Without such a device 48 in. is standard. Truck beds are lower when the vehicle is loaded than when it is empty. This difference can be compensated for by means of chocks or hydraulic tilts if the situation is too serious. This principle is shown in Fig. 6.

With the increase in trucking activities, many cities are ruling that truck bays must be within the building line to avoid interference with passing traffic. Fig. 4 illustrates minimum dimensions for such constructions. They are based on current state limitations as to width and height of vehicles.

The important physical features discussed here all have a bearing on handling operations on platforms. In subsequent articles equipment and methods used in moving products in and out of trucks, trailers, and rail cars will be studied in detail. The equipment and methods employed will be analyzed with relation to specific problems.

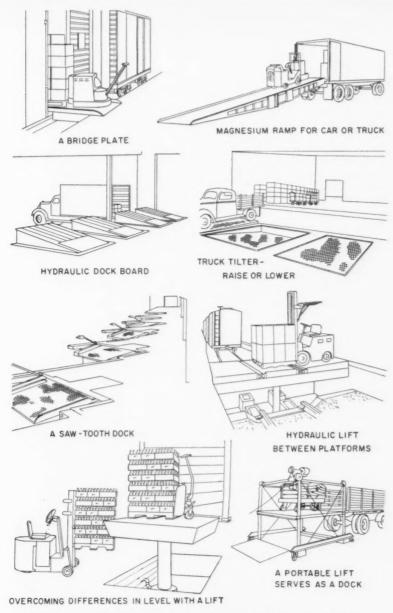


FIG. 6—HOW DOCKS CAN BE IMPROVED AND SOME OPERATIONS FROM THE GROUND

Materials Handling Equipment

Material included in this series of articles is being published in book form. The book, to be called "Materials Handling Equipment," is scheduled for publication by Chilton Co. this summer. It will include more than 600 line illustrations and some 576 pages. The volume will sell for approximately \$15. Prepublication orders can be placed through the editor of this magazine.

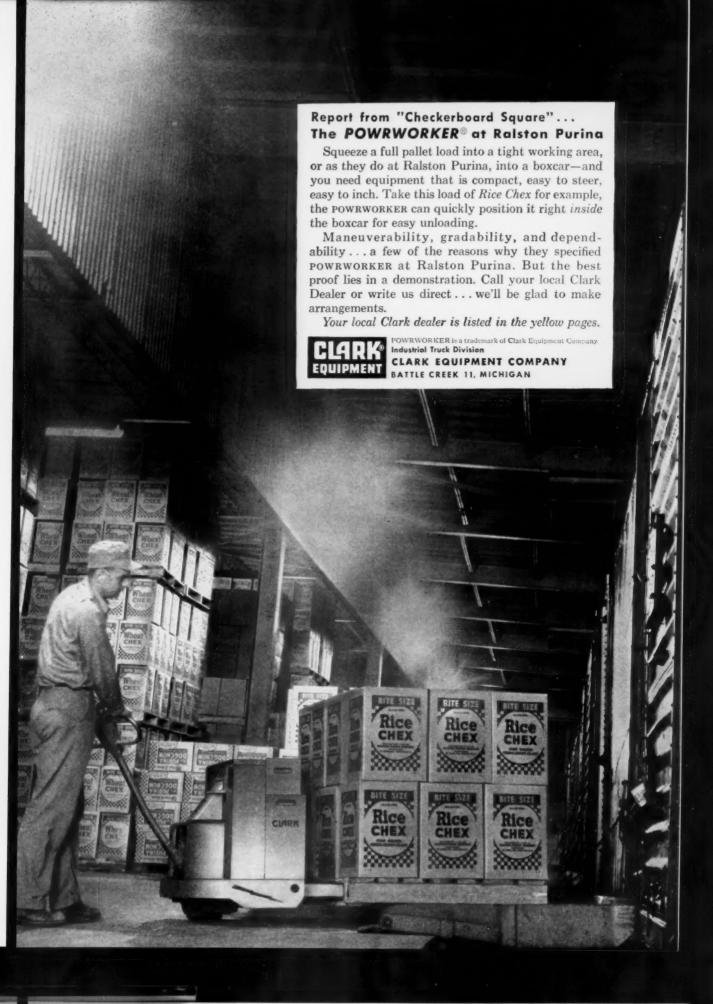


Write or phone for recommendation by specialists

The Colson Corporation · General Offices, Elyria, Ohio

Factories in Elyria, Boston, Toronto

Circle No. 15 on Card, Facing Page 69, for more information





Meet Your Personal Air Cargo Representative

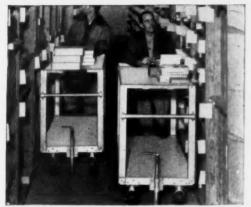
IN GREAT BRITAIN

Arnold J. Weight is his name, better known as "Kilo" Weight. As KLM Air Cargo Manager for Great Britain, his job is expediting your shipments. Tonnage through his area increased fourfold over the past seven years, proof that others in your field have found Mr. Weight and the organization he heads capable carriers. Whether your shipments fly between the U.S. and Great Britain or points beyond, Mr. Weight and KLM facilities are completely at your service, protecting your interests in Great Britain and the Continent.

All around the world-in 74 countries on six continents-experienced KLM air cargo personnel are always ready to work for you, to keep your merchandise moving fast on the ground and in the air. For personalized air cargo service to and from Great Britain . . . or anywhere in the world . . . call your freight forwarder or nearest KLM office for lowest rates on your commodity. Pickup and delivery service if you wish.



For Air Cargo Speed, Service and Dependability KLM ROYAL DUTCH AIRLINES Air Cargo Leader Across the Atlantic



Order Filling, Sorting, Warehousing



Commissary and Other Food Handling



Servicing Production Lines



Number and Spacing of Decks
To Meet Your Specific Needs

Magcoa/Tobey multi-deck aluminum trucks solve scores of typical problems

Now you can have all the functional advantages of multi-deck trucks... plus the lightness, maneuverability and maintenance-freedom of exclusive-Magcoa/Tobey aluminum construction.

Hundreds of companies use standard Magcoa/Tobey multideck aluminum trucks to solve a variety of special problems: order filling, sorting, warehousing, moving materials to production lines, live storage, commissary and other food handling jobs, to name a few. How many problem jobs could Magcoa/Tobey multideck trucks do in your company?

Consider these advantages of Magcoa/Tobey standard multideck trucks: wide range of deck sizes; any number of decks you want; any spacing desired between decks; aluminum construction for lightness, cleanliness, freedom from maintenance; exclusive Magcoa/Tobey casters for the ultimate in maneuverability and rolling ease.

The combination of lightness and revolutionary caster construction makes Magcoa/Tobey your best truck buy because it cuts the important part of truck costs—the cost of moving the truck!

In addition to multi-deck trucks, Magcoa/Tobey offers dozens of other styles in hundreds of sizes—flat bed, fixed end, bin type, trailers... with a variety of wheel sizes and tire types.

An illustrated data file tells the whole Magcoa/Tobey story, shows construction, economy features and other advantages. Use handy coupon to get your copy.

MAGNESIUM COMPANY OF AMERICA

TOBEY ALUMINUM DIVISION

East Chicago 3, Indiana Representatives in Principal Cities

Please send Magcaa/Tobey Data File

Name and title

Campany

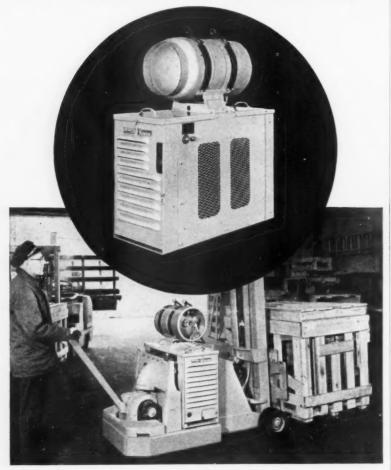
Address

City-Zone-State

Copyright, 1956, Magnesium Company of America

LPG-ELECTRIC

The Versatile READY-POWER way!



New! Bantam Model W12 for Electric Powerized Hand Trucks

Ready-Power combines full electric power with no fatigue AND the economy and low maintenance of LP-gas in one compact new power unit. Installation is quick and easy on any make of motorized electric hand truck with adequate sized power compartment. Bantam model W12 accommodates an interchangeable 20-pound fuel cylinder, includes a quick-disconnect fuel line coupling for safety, has removable end, side and cover plates for easy accessibility. LP-gas components are listed by Underwriters' Laboratories and comply with Factory Mutual recommendations. It's easy to convert your present trucks to this modern, full-production power. Specify "Ready-Power" when ordering new trucks. Write for information.

READY-POWER

The READY-POWER Co., 3821 GRAND RIVER AVE., DETROIT 8, MICH.

Manufacturers of Gas and Diesel Engine-Driven Generators and Air Conditioning Units; Gas and Diesel-Electic Power Units for Industrial Trucks

Circle No. 17 on Card, Facing Page 69, for more information

... Management

(Continued from Page 37)

again finds many cases of transportation services being regarded as part of the regular chamber budget. However, like chambers in smaller communities, traffic bureau activities are supplied mainly to individual members. However, projects beneficial to the whole community, such as rate analyses to attract new industry and the representation of both members and the community before regulatory agencies, are rendered.

Large Cities

In cities of over 200,000 population, chamber-operated transportation services are much more numerous than separately - maintained or "bureau" services. Here traffic management and other transportation activities are aimed at the community level. Full traffic bureau services when rendered to individual members are, of course, on the fee basis depending on the amount and type of service used. In the larger cities, over 500,000 population, one finds that traffic activities are not only at the community level but are concerned with regional problems.

Rate studies

Conducting rate and service studies in cooperation with their industrial departments is one of the major traffic activities of the larger chambers. Such studies are used to emphasize the transportation advantages of the community to attract new industries. Individual transportation problems of prospective industries are analyzed so as to present them with a complete plan for the most economical use of available transportation facilities. To protect community transportation interests, large chambers are frequently participants in hearings before federal and state regulatory bodies. Activities in the legislative field are another major activity of the larger chamber traffic departments. Much work is also carried on with shipper groups rather than individual shippers. The interests of the individual, however, are never neglected

Lack of Funds

Lack of finances is the principal reason given by chambers in the medium sized towns for not maintaining traffic bureau service as a part of their regular activities. the Transportation and Communication Department of the United States Chamber of Commerce reports. While many local chambers are convinced of the community benefits resulting from traffic services, the difficulty in gaining financial support has caused them either to abandon existing services or postpone future plans for a traffic bureau. The main difficulty seems to be collecting sufficient funds from members who have their own well-organized traffic departments. They naturally are reluctant to contribute to what may seem to them un-needed service. Even more difficult, however, is the problem of collecting from members who, even though they may be principal beneficiaries of the service, are unwilling to pay their share.

Promotional Data

Convincing promotional material showing how community traffic service is a vital activity is needed. In fact, an efficient chamber of commerce traffic and transportation department or traffic bureau is necessary to assure the community and its trade territory of adequate service via all forms of transportation at just, reasonable, and non-discriminatory rates and fares. Small firms, without adequate traffic departments of their own, obtain valuable advice on better and cheaper methods of distributing their products from a chamber of commerce traffic de-

Large firms save time and expense by having a chamber of commerce handle cases before regulatory bodies. It is wise for both large and small firms to rely on the chamber for such activities. A more impressive presentation is achieved, since the chamber represents all types of industries and speaks for large groups of travelers and shippers.

(Resume Reading on Page 38)



nominal expense.

ROLLER GRAVITY BELT LIVE ROLLER

WHEEL GRAVITY

UNIT BOOSTERS

TRADE-MARK

FOR FURTHER INFORMATION.

CLIP TO YOUR LETTERHEAD

282 Lamson Street, Syracuse 1, N. Y.

Plants in Syracuse and San Francisco Offices in Principal Cities

- Have a Lamson Dealer call me for an appointment.
- Send me a free copy of the booklet describing Lamson preengineered Erecto Conveyor Units.

Circle No. 18 on Card, Facing Page 69, for more information

Model Training Program . . .

(Continued from Page 43)

ance that the load builder will do a more effective job.

Determining space and arrangement of items by drafting methods usually is costly and time consuming. Drawings may require projections and plan lay-outs to adequately present all the details. When a more realistic presenta-

tion is required, it is necessary to use perspective or rendered drawings. These add to the cost of the project.

Using a model vehicle, a model load can be reconstructed step by step as photographs are being taken in color or black and white. If call outs are required for any

of the components, they can be provided by pin point labels which contain the name of the item or which are numbered in sequence. Attaching a specification sheet for materials and sizes of materials to such photographs provides a complete set of instructions. Such photographs can be reproduced and printed in book form with little or no loss in value.

Shippers and Carriers

The main problem is providing shipper and carrier personnel with adequate instructions for loading commodities and equipment. Assimilation of the information by those performing the actual loading and inspecting is the most difficult task. But there still is a gap between making the information available and getting it across to those concerned.

The Association of American Railroads designs and develops carloading methods and issues rules and regulations governing shipment by rail. This is an important effort, since damage claims against the railroads alone approximate \$100 million dollars a year.

Although it would appear that loading problems of truck lines and railroads are similar, there are basic differences. Trucks are not humped. Longitudinal and transverse impacts are not as severe as they are in rail cars. However, differences in roadbeds and spring suspension systems result in completely different vibration and vertical shock loads. In addition, there are basic structural differences which prevent carloading methods from being applied to truck loading.

Aircraft and ship loading involve other unique problems relative to utilization of space and weight distribution. The problem of proper stowage to prevent loads from shifting in transit is particularly acute in the air and water carrier fields.

Considering the variety of sizes, weights, and shapes of items to be shipped, and the many different types of rail cars, trucks, aircraft, and vessels, loading can become a real problem when there is no systematic approach. An important point to keep in mind is the cube



OWNERS of the new Hyster QC 20
Lift Truck already know of the advantages of the Model VH4 Wisconsin Air-Cooled
Engine. When you specify a Model VH4 as power for your next lift truck, you get the same advantages: 1. Fool-proof air-cooling... providing unfailing performance in heated warehouse or coldest loading dock. No water to boil away or antifreeze to add. 2. Simplified maintenance... when there are no water jackets or hoses. 3. Rugged construction... assuring you of longest engine life. 4. Topflight performance... because of high torque design.

Today, write for additional data about the smooth "idling", even-firing Model VH4 . . . Bulletin S-196.



WISCONSIN MOTOR CORPORATION

World's Largest Builder of Heavy-Duty Air-Cooled Engines
MILWAUKEE 46, WISCONSIN

Circle No. 19 on Card, Facing Page 69, for more information

which will be occupied by the item. All of these factors are reflected in the physical distribution costs and in losses and damage.

Models of rail cars, truck trailers, cargo aircraft, and ships' holds can assist both shippers and carriers solve their problems. They can help to train those who load the trucks, position containers in a car, or actually construct the structural frames for rigid bracing. They can be used to develop standard carloading methods, improve present methods, and to train loading personnel.

A shipper or carrier would be wise to use model trailers and model items which represent the majority of his tonnage.

They could arrange to have small lecture groups for training purposes, to solve various loading problems with the models, to determine their skill in arranging or rearranging loads, and to instruct those who inspect loads to determine their suitability for shipment. The exact shape of items being shipped does not have to be duplicated in the model, although the problems involved must be considered.

While the Bureau of Ordnance is successfully using scale models, both as a training tool and as an aid in developing proper methods of loading, blocking, and bracing of military items, similar advantages could be realized by those concerned with the shipment of non-military goods.

(Resume Reading on Page 44)

Manufacturing Addition



Container Stapling Corp. has announced completion of this new factory building in Herrin, Ill. The new building adds 50,000 sq ft of manufacturing space devoted entirely to the production of stapling machinery and staples. Erected with steel frame and galvanized steel roof, the building is completely sprinklered throughout

Stacking Problem? call EMI



"well stacked" or shipped on EMI racks

Big or little, strong or fragile, anything stacks or ships better on EMI quality racks. They protect stock, cut handling costs and speed inventory.

EMI RACKS are made of strong, tubular steel and are adjustable to fit any space or unit load. Special racks designed to your specifications with field engineering service on any installation.

Write for our illustrated catalog before you plan additional storage space or the purchase of stacking or shipping equipment.

Well Stacked Racks for Industry



COUL & REEL RACKS

BAR STOCK RACKS

SPECIAL SHIPPORE RACKS

PORTABLE STOCK RACKS

BOUTLESS PALLET

BOUTLESS PALLET

Circle No. 20 on Card, Facing Page 69, for more information



TURN LOSSES **INTO PROFITS!**

COOKE personalized service cuts your costs, raises your profits through individual solutions to your particular warehousing, transportation and physical distribution problems. 30 years a leader in public merchandise warehousing in the world's greatest distribution center! Unsurpassed in specially. trained personnel, methods, equipment and facilities! Write today for detailed brochure

when time and money count, count on



I LEO COOKE WAREHOUSE CORP

JERSEY CITY & TRENTON, N. J.

PENN RR: 140 Bay St. Jersey City 2 Oldfield 3-5080 • WHitehall 3-5090 Whitehead Rd., Trenton 9 • JUniper 7-4646 ERIE RR: 12th & Provost St., Jersey City 2 Oldfield 3-5080 WHitehall 3-5090 TWX: JC-112



EASTERN REPRESENTATIVES FOR North Pier Terminal, Chicago, 111. Encinal Terminals, Alameda, Calif.



Plant Relocation Cures

Continued from Page 51

Some paper mills find it necessary to locate where they can dispose of their waste even though they must pipe water many miles. Piping water is less costly than pumping waste. Generating stations sometimes find it cheaper to ship coal by barge than to "ship" the electricity for long distances over transmission lines.

A careful check is needed to insure the continuing availability of raw materials. If these come from a supplier, it is not always wise to be dependent on a single source.

A further problem arises with multi-plant operation in distributing raw materials to various plants scattered throughout a region or the entire country. Again. freight rates should be considered. The ultimate location may require considerable adjustments with

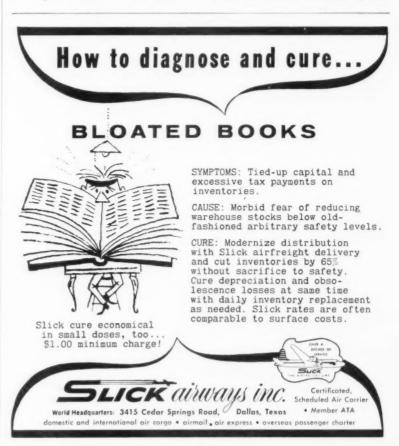
The availability of an adequate labor pool is a must. The need for

skilled labor may be a limiting factor. If unskilled labor is used. the location may be such that the available supply is less costly than in highly developed industrial regions.

Many plants moving to rural areas find it possible to use labor coming from many miles away. These people provide their own transportation. In many areas they have not yet been organized. In addition, because rural people usually have had some mechanical training, they often can be trained with a high degree of efficiency to perform semi-skilled work.

Transportation

The type of transportation suitable to one location is not necessarily the best for another. All modes of carriage-rail, truck, water, air, and pipeline-should be considered. A decision also must be made as to whether public



or private transportation can be best used at the new site, or whether both types should be used in combination.

Some traffic managers feel that a rail siding is a must because freight rates often are lower by rail than by truck. However, if a siding costs \$150,000 and company policy requires that it be written off in 10 years, it must offer savings of not less than \$15,000 a year.

Water transportation, while time consuming, can be profitable. One manufacturer of a highly seasonal item maintains production throughout the year. Shipments are direct from plant to customer. When forwarded by water the time in transit is so much longer than by rail or truck that the manufacturer is provided with inexpensive storage during shipment.

Air transportation, despite its high rates may offer a saving when all cost factors are considered. Often fast delivery permits the reduction of inventory investment with consequent reduction of insurance, taxes, and storage facilities.

Warehousing

The least costly way to ship is direct. As each order is completed it is loaded into a waiting car or truck and sent direct to the customer. There are no warehousing costs, handlings are minimized, paperwork is simplified, and no capital is tied up in inventory.

Such a system, however, seldom is practical. It leads to short production runs, which are costly. These increased production costs alone may more than offset all other savings. In direct shipping the shipping room must be larger than normal. Because some orders cannot be shipped piecemeal, they must wait on the shipping room floor until completed. If this waiting stretches out over days or weeks, a temporary storage area must be set up in the shipping room.

In direct shipment systems goods usually go out in less carload and less than truck load quantities. This results in higher rates, and may create delivery problems. With sales becoming more and (Please Turn Page)

Yes ANY STORAGE RACK LETS YOU STACK FOR EXTRA SPACE-



DUT Makes storage space SO VERSATILE!

- · Quickly erected!
- Instantly rearranged!
- Simply adjusted! Easily relocated!
- No tools, nuts, bolts or welding!
- No special labor needed at any time!
- · No cross bracing of any kind!
- All parts 100% reusable!
- Safe loading of bars up to 8,000 lbs. per pair.

Sturdi-Bilt makes the most of your storage facilities! It doesn't matter what you store — how much, how heavy or how big — Sturdi-Bilt Racks are simply adjusted to meet your need.

No "One Way" storage system here—instead you receive complete freedom in types of storage—Pallets, Skids, Dies or Bulk—plus flexibility for variations in size, and economies in set-up and daily



Sturdi-Bilt

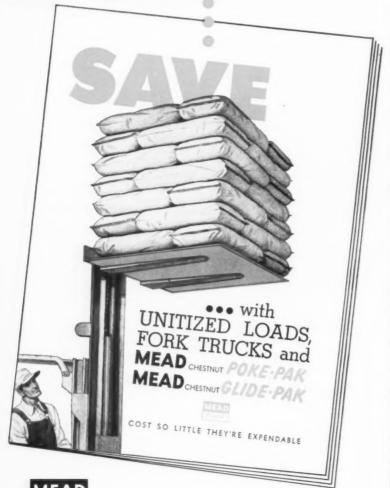
U. S. Patent No. 2760650 Other patents pending.

WRITE FOR FOLDER No. DA-74

Sturdi-Bilt Engineering Company 2501 Peterson Avenue Chicago 43, Illinois

Circle No. 21 on Card, Facing Page 69, for more information

free booklet TELLS HOW TO



board

Learn the amazing economy of handling unitized loads with fork trucks and Mead Chestnut Poke-Pak and Glide-Pak, the ultimate in pallets. Spot-glue your bags or cartons, fill a car in one or two hours with only 26 unitized loads, which handle right through to final breakup. Compare with hand-trucking 1560 50-lb. bags! Ask our nearest office for booklet. FREE CONSULTANT SERVICE upon request: carloading diagrams, bag patterns, samples.

THE MEAD CORPORATION Sales Offices: Mead Board Sales, Inc.

Jules Offices. Medu	bould sales, I	116.
LYNCHBURG 2, VIRGINIA		er Road
CINCINNATI 9, OHIO		on Road
CHICAGO 30, ILLINOIS	6124 N. Milwauk	ee Ave.
NEWARK 2, NEW JERSEY		e Court
DETROIT 35, MICHIGAN	18045 James Couze	ns Hwy.
BOSTON 15, MASSACHUSETTS		Street



COST SO LITTLE THEY'RE EXPENDABLE

Circle No. 22 on Card, Facing Page 69, for more information

Plant . . .

Continued from Preceding Page

more dependent upon customer service, direct shipping is becoming less and less satisfactory.

Many plants have warehouses on their factory sites. Such storage offers more flexibility in production and provides a place to put the goods as they come off of the production line. The system has its drawbacks too. Land costs are high, goods still have to be carried in and out, and the problem of shipping over long distances makes it difficult to control arrival times.

With a multi-plant operation the scheduling of different parts of a single order becomes complex. Unless an elaborate and costly control system is established, inadequate service results.

Branch Warehouses

More and more companies are establishing branch warehouses. Such operations can be set up in warehouses owned and operated by the manufacturer; they can be operated by the manufacturer in leased space: or the entire system of branch and spot warehousing can be turned over to the public warehousing industry. The trend seems to be to public warehousing. (See, "So You Want to Build a Warehouse." DISTRIBUTION AGE, Jan., 1956, p. 36, and "Warehousing Riddle Finds an Answer," DA, Feb., 1957, p. 40, and Mar., 1957, p. 57.)

Although branch warehouse operations boost warehouse costs and require larger inventories, they usually offer the most economical form of physical distribution. If a single warehouse is provided to service an area, orders can be sent direct to the warehouse and, if necessary, shipped out again on the day of receipt.

In most cases the improvement in customer service results in increased business. In addition, once the branch warehousing concept is accepted, a company is not likely to be limited in its expansion plans because of a warehousing bottleneck. There are many other factors which must be considered by the traffic manager in studying plant relocation. There must be adequate natural resources, including good water, clean air, favorable climate, etc. Community services for power supply, fire and police protection, and waste disposal must be assured.

Reasonable Taxation

Taxation must be reasonable. Community indebtedness must be studied to make an estimate of future assessments. Land costs must be equitable. Community schools and housing should be adequate to handle the influx of employes who will move with the business. The location should be satisfactory to key employes whose services will continue to be needed. And, finally, the effect of the business itself on the new community should be considered.

All of these factors must be considered individually and in conjunction with all other factors involved. The most important step in any relocation plan is the preplanning. No proposed move should be made or rejected, until a thorough analysis is made.

(Resume Reading on Page 52)

Piggy-Back Hitch



No damage is found after shock tests of a new trailer-on-flat car tie-down developed by the American Car and Foundry Division of ACF Industries, Inc. Engineers lower the new device, officially known as the retractable trailer hitch, for examination following tests in which it withstood force two and a half times as great as that which broke conventional tie-downs. The new tie-down is a folding stanchion that can be installed on any flatcar bed. It is raised by means of a power wrench until it meshes with the trailer's kingpin and levels the load. It is then locked in place and becomes a mooring

for DEPENDABLE MOVING



CALL YOUR ALLIED MOVER ... he's the No.I Specialist

Ask your Allied Mover for a copy of "Before You Move." See yellow pages of your phone book, or write Allied Van Lines, Inc., Broadview, Illinois.



ALLIED VAN LINES . WORLD'S LARGEST LONG-DISTANCE MOVERS

Bourbon? Bird seed? Bon bons?

You name it. If it's general merchandise or U.S. Customs and Internal Revenue Bonded Storage, San Francisco Warehouse handles it!

Here's the ideal place for storage and distribution . . . ideal in climate and humidity as well as location . . . central to all the West and right in the heart of a seven-county \$6,000,000,000 annual income market!

Facts to consider:

- 50 years of responsible service
- 500,000 square feet of storage area
- Sprinklered or Electric Fire
 Detectors
- ADT Supervised
- Office accommodations and Telephone service
- · Pool Car Distribution
- Permitted City and Common Carrier
- Private RR Sidings
- Reciprocal
 Switching



SAN FRANCISCO WAREHOUSE CO.

MAIN OFFICE :

605 Third Street, San Francisco 7, Calif. Phone SUtter 1-3461 Teletype SF933

NEW YORK REPRESENTATIVE: Distribution Service, Inc., 30 Church St. Phone REctor 2-1580

CHICAGO REPRESENTATIVE:

Distribution Service, Inc., 251 East Grand Avenue Phone Superior 7-7180

A Second Look at . .

(Continued from Page 54)

We have compared this C-2 with the "TMT Carib Queen." Although the Queen has greater speed, we have taken speed and turn-around factors as exactly the same. The C-2 had 569,212 bale capacity. The Queen has only 298,000 bale capacity. The C-2 carries 14,230 measurement tons and the Queen carries 8300 measurement tons. The C-2 carried a load of 5015 long tons, while the Queen, if loaded to capacity, would carry only 4200 long tons.

Broken Stowage

When you consider the cubic relation of the ships, you will find that due to broken stowage even a very loaded ship, as the C-2 had been, has a loss of 18 per cent of bale capacity.

We have not taken this into consideration because TMT doesn't operate on a bale capacity basis with its trailerships. We go by the

bale capacity of our "containers" alone on the ship—that is, our truck-trailers.

Of the up-to-date trailers which are specially equipped for the cargo we shall move in the transatlantic general commodity trade, better than 40 per cent falls in the 40 to 70 cu ft a long ton average. Another 40 per cent falls in the average between 160 and 600 cu ft a long ton. Therefore, the more cube you get, the better off you are with trailers.

Now what does this mean? It took the C-2 35 days to build up its cargo in sheds and ports. It takes an average of only four days for TMT to prepare the equivalent cargo. The C-2 has been able to load 1254 long tons per eighthour shift. We are able to load the entire 7150 tons that our trailership will carry, in the same time. The C-2 can make a round trip to Europe on a one port call at each end with unload and load in 39 days. Our ship, because of its greater speed, can make the same round trip in 18 days. That means the C-2 can make only nine round trips a year while we can make 191/2 round trips with our trailership.

The C-2 carries 201,000 metric tons per year while the trailership carries 278,850 metric tons. It is the occupancy rate of the real estate piece—in this instance a ship—that really counts. It isn't the space which you load or lose. It is average utilization of dollars or man-hours that counts.

Over-All Cost

The over-all cost of moving freight on board a trailership is approximately one-third that of handling cargo on a C-2 of similar capacity. The figures are actually \$13.09 on the C-2 operation, as compared to \$4.32.

Using figures in connection with a study on a C-3, it would bring the C-3 in the range of \$21.60 per handling ton and for our ship \$8.40. That is approximately a little over a third of the cost.



The capacity of the Queen class in measurement tons has been figured as follows: trailers 4600, dispatch vans 50, 100 cars 1500 tons, and 1000 tons of oil, 1000. The total is 7150.

Making Money

We can make money in only two ways: (a) get freight; and (b) get it in and out of port fast. Any shortcoming of freight in this trailerized operation would be more deadly to the high cost, high speed ship than to any other type of vessel.

TMT has purchased a hull which will be modified to become a sister ship to the "TMT Carib Queen." It is called the "TMT Florida Queen." It was formerly a railroad-car ferry and operated between Port Everglades and Cuba. When in service it carried 24 average 40-ft 3-in, railroad cars. As a rail car ferry, fully loaded, its speed was only 15 knots. Utilized commercial cargo space in the box cars was 65.952 cu ft. After the vessel is modified to a three-deck trailership its commercial efficiency will have been increased to a capacity of 261,500 cu ft and it will operate at approximately 17 knots. Loading and unloading time will be cut from eight to four hours.

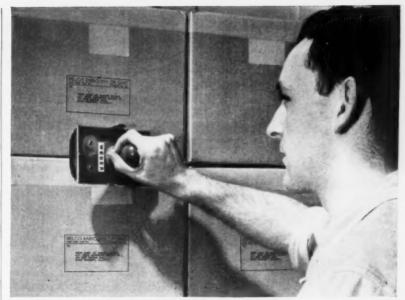
In addition, TMT is building a special trailer which we call the "Ship Trailer." The difference between this and ordinary highway trailers is that the former reduces the loss of cube below the trailer.

Our "Ship Trailer" is similar to a "low-boy" or machinery trailer. It has a goose-neck and is low to the ground.

Goose-Neck Detached

The goose-neck can be detached to leave the trailer in the ship. With this type of trailer we will get on a trailership the identical weight and cube ratio of a 40-ft 3-in. railroad car. As a result we will be able to get about one-fourth more into our trailer in the same square-foot surface space a railroad car will use on a ship. We can load a ship with 92 big trailers, plus 20 small trailers and 100 automobiles. Thus we will have almost tripled the capacity

(Please Turn Page)



Good way to address cartons

You can print facsimile labels directly on cartons. Saves cost of labels. Faster than stencilboards. It's called the Weber Facsimile-Label System.

Here's a fast, systematic way for addressing multiple shipments. In one easy motion, you can imprint both a facsimile label and customer's address directly on a carton. 30 to 40 cartons can be addressed in a minute. No labels to type or apply; no ink brushes and stencilboards to wield. Facsimile labels are sharp and clear, yet can be easily blocked out for re-handling by consignee.

All that's needed is a Weber handprinter and Kustom-Kut stencil. Stencils are die-cut with facsimile of your label. All you do is type the customer's address on the stencil and attach to the printer. Fast, neat, systematic and inexpensive. Write for full details on the Weber Facsimile-Label System.

Good for product identification marking too



marking systems

Division of Weber Addressing Machine Co., Inc. Mount Prospect, Illinois

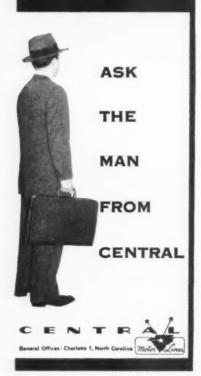


DEALER SALES AND SERVICE IN ALL PRINCIPAL CITIES

FREE BULLETIN on Weber-Facsimile Label Sys- tem. Just mail this coupon.	WEBER MARKING SYSTEMS Dept. 20-D Mount Prospect, Illinois
	Company
	Individual
	Position
	Address
	CityZoneState

Circle No. 23 on Card, Facing Page 69, for more information

what are you doing about your small shipment problem?



A Second Look at . . .

(Continued from Preceding Page)

of the railroad car ship in placing it in a roll-on operation.

Door-to-door Delivery

The principal feature of trailer-ship service is door-to-door delivery of merchandise without intermediate handling, from origin to destination in the same container—the sealed truck trailer. TMT's interline arrangements with other carriers allow the issuance of "on board" bills of lading at any inland point as soon as a shipment is tendered to TMT's interline truck or rail carrier.

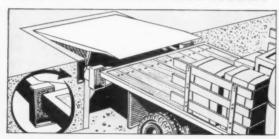
This procedure allows the shipper to collect on his invoice in almost half the usual time from his local bank.

A recent development aimed at clearing the way for international trailer service was a resolution adopted by the Executive Committee of the American Trucking Associations, Inc. It requested the U. S. Government to adopt standard cargo documentation for the international movement of truck trailers, a program now in operation in Europe.

The Department of State was asked to initiate steps for the adherence of the U.S. to an international agreement which provides for the use of special booklets called "Carnets." A "Carnet" accompanies each loaded trailer. It contains 24 coupons. each a manifest. Before merchandise carried by the trailer leaves its point of origin, it is bonded by the International Road Transport Union to guarantee payment of customs duties before delivery to the ultimate consignee. Under this system the trailer can move across the borders of as many as 12 foreign countries without being opened for custom inspection. .

(Resume Reading on Page 55)

SAFE AUTOMATICALLY



RITE · HITE

AUTOMATIC TRUCK RAMP

- NO ATTENDANT NEEDED. Automatic leveling of ramp removes "human element" and chance of accidents.
- NO HEAVY ARMS OR LEVERS. Possibility of strains and ruptures eliminated. The truck does all the work.
- NOTHING PROJECTS ABOVE DOCK FLOOR to trip walkers or damage fork trucks.
- UNBALANCED 20,000-POUND LOADS CARRIED SAFELY.
 Rite-Hite platform supports capacity 20,000-pound load.
- NO COMPLICATED MECHANISM OR CONTROLS to fail and cause trouble. Rite-Hite has simple, precision counterbalancing.

For automatic safety, for automatic savings—investigate Rite-Hite first. Write today for details, Dept. D-47.



LOOMIS MACHINE COMPANY 133 East Fourth St., Clare, Mich.

Circle No. 24 on Card, Facing Page 69, for more information

* The Low Cost Answer to Increased Materials Handling Efficiency



BECAUSE each low cost IMP boosts vehicle efficiency tremendously . . . and immediately . . . your investment in this according to the control of the control

Designed for triple duty as base transmitter, mobile radiotelephone, and public address system, the IMP keeps vehicles in contact with each other as well as central dispatching . . . stops empty trips and needless backtracking . . . turns every trip into a payload houl!

Ruggedly built for industrial use, the IMP measures only $12\frac{1}{2}$ " x $8\frac{1}{4}$ " x $5\frac{1}{4}$ ". Installation is simple, tune-up not required, and maintenance costs low.

Call your Kaar dealer for a demonstration.



ENGINEERING CORP.

2980 Middlefield Rd., Palo Alto, Californio Canadian Office: 801 Dominion Bldg., Vancouver, B. C.

Circle No. 25 on Card, Facing Page 69, for more information

DISTRIBUTION AGE

Selection

(Continued from Page 45)

news to most of you we have had men on our docks who could neither read nor count. Is it any wonder we have had freight go astray or improper quantities accounted for when the men who handle the freight cannot count?

For all management personnel, at-any level from terminal manager on down through the different supervisory jobs, we made every effort possible to promote from within, in accordance with company policy. Thus, we were able to upgrade one of the master drivers, who had already had formal training in driver training, to become a driver supervisor. Another master driver was made into a trained dispatcher.

Since we make it a practice to carry on a continuing program of job studies, the jobs of the driver supervisor and master driver already were described, so the selection and upgrading the master driver to the job of driver supervisor was a fairly simple and logical step. The assistant driver supervisor was selected and trained via the same route.

The operations manager was transferred and coached to the new location. The three shift dock foremen were included in this program. Two of them were transfers from other terminals and one was chosen for promotion on the basis of personnel specifications and stated testing procedures and allowable scores.

Internal Training

We have had an internal training program at the General Office to prepare promising men for upgrading. One of our internal trainees was marked for one of the operating jobs. In preparation for this training he spent approximately six months at the General Office, working in each department and learning the objectives, methods, procedures, and records pertinent to each of the departments.

Riss uses personality tests in conjunction with practically all

(Please Turn Page)



This truck suits 'em all!



WORLD'S MOST POPULAR pallet truck because it does so many jobs so well. Superbly built to withstand years of use and abuse.

LIGHTWEIGHT . . . lessens operator fatique.

EASY TO MANEUVER . . . easy to pull . patented booster roll permits effortless pallet entry.

CONVENIENT FOOT PEDALS lift and lower your load.

· Completely precision hydraulic for dependable operation. Has aluminum alloy construction, husky one-piece welded steel frame, safe dual-purpose brake, 270° turning radius.



Mail Coupon for full details!

The RAYMOND CORPORATION

13906 Madison St., Greene, N.Y.

Send bulletin on Light- weight Hydraulic Pallet Truck.	NAME	TITLE
Please have a RAYMOND representative call.	COMPANY	
	STREET	

Circle No. 26 on Card, Facing Page 69, for more information

Why warehouse after warehouse is a



Office and warehouse in Butler building with attractive, architecturally-styled front. Side and back walls are metal for future expansion.

Butler pre-engineered building

We don't mean to be pompous, but more Butler buildings are used for warehouses than any other metal building. Not the cheapest way to build — but the lowest cost way to build well.

Butler steel frames give you postfree interiors up to 100 feet wide. Trussfree gables permit stacking clear up to the roof peak. You get more usable space per dollar. Solid banks of overhead doors can be installed without special construction to support the roof. Protection? It couldn't be better. Fire-safe, maintenance-free Butler metal panels are die-formed. They nest together precisely — shield the contents like a one-piece metal shell. Good insulation is easy. Lighting and ventilation are ideal.

Add it up. It's the lowest-cost way to get a good warehouse. That's a lot to claim, we know, but your Butler Builder can prove it! Call him. He's listed in the Yellow Pages under "Buildings" or "Steel Buildings." Or write direct.



BUTLER MANUFACTURING COMPANY

7419 East 13th Street, Kansas City 26, Missouri

Buildings • Farm Equipment

Dry Cleaners Equipment • Custom Fabrication

Oil Equipment • Outdoor Advertising Equipment

Sales offices in Los Angeles and Richmond, Calif. Houston, Tex. * Birmingham, Ala. * Atlanta, Ga. Minneapolis, Minn. * Chicago, Ill. * Detroit, Mich. Cleveland, Ohio * New York City & Syracuse, N.Y. Washington, D.C. * Burlington, Ontario, Canada

Circle 27 on Card Facing Page 69

Selection and Training . . .

(Continued from Preceding Page)

selection procedures. On some jobs we want leaders, while on others we are particularly desirous of those who will follow good leadership.

Maintenance crew selection was handled locally on the basis of a mechanical aptitude test, a mechanics specific experience questionnaire, a visual check, and, as with all applicants, contacting a former employer by telephone or letter.

The head of the terminal maintenance group was brought into the General Office in Kansas City to learn maintenance administration under the guidance of the director of maintenance.

This man was given a good knowledge of the planning, organizing layout, work loads, and training of the mechanics as well as the actual work assignments on the inspections, PM's, repairs, and replacements.

NOW! STOP WASTEFUL EXPENSE AT YOUR RAILROAD SIDING



IF YOU actually saw a Lo-Hed Car Puller in operation you'd probably order one in a hurry. It is a first rate investment because a Lo-Hed Car Puller pays for itself fast. It puts a stop to shifting charges. Cars get loaded and unloaded in record time. Demurrage charges are slashed. Industrial accidents are minimized... And a Lo-Hed Car Puller saves money inside a plant, too—pulls loads in a straight line, up grades and around corners.

Lo-Hed Car Puller is rugged, electrically-driven. Write for folder telling you how to use Car Puller in your plant.

-AMERICAN ENGINEERING

COMPANY
Dept. CP-182, Wheatsheaf Lane & Sepvira St
PHILADELPHIA 37, PA.

CANADIAN SUBSIDIARIES: Affiliated Engineering Corporations, Ltd., Montreal 16, P. Q.
Bawden Industries Ltd., Toronto, Ont.

Circle 28 on Card Facing Page 69

Our selection and training field is similar to the Roadeo type tests of the American Trucking Associations. In the interest of saving time in the selection of would-be drivers, if the applicant gets to the point where it looked as if he might stand a chance, he is asked to get into one of our pieces of equipment and after several minutes' practice in the shifting of gears, is asked to perform on one of the selection driving tests, such as going forward and back on a straight line, keeping designated wheels completely covering the line in either direction.

Nothing has been said about the methods used at our terminals. other than to state that we have attempted to work toward standard job methods with increasing training of employes toward a satisfactory level of performance. The General Office management group is working together as a training group, in addition to the policies formation, setting up standards, methods, procedures, and maintaining records, and audits. It has been found to be both feasible and extremely valuable to use different General Office functional heads and staff members to set up their proper functional counterparts at the terminal level.

To summarize, we believe that the proper analysis of jobs will tell us:

- 1. What is to be done on the job;
- 2. What kind of a person can do that job:
- 3. What are the responsibilities and authorities connected with the job:
- 4. How much should the job pay;
- 5. How do we want the job performed;
- 6. What training steps will we have to take in order to train an applicant to satisfactorily perform the chosen job.

Editor's Note: This article is excerpted from an address given by Mr. Seashore at the recent Eighth Annual Meeting of the Operations Council, American Trucking Associations, Inc.

(Resume Reading on Page 46)

Traffic Men . . .

(Continued from Page 71)

boxcars in relation to those of other lengths, and a decided stepup in number produced is recommended.

- 3. Present standard cars with 10 ft, 6 in. inside height and 9 ft, 2 in. width are considered adequate.
- 4. Car floors are too weak. They need additional strength and durability to withstand usage and concentrated weight of lift trucks or other mechanical devices to load and unload. Increased attention to flooring is recommended. If wood floors are used, the report suggests at least 2½-in. thickness of the tongue and groove variety . . . with adequate steel underbracing. Nailable steel flooring is preferred.
- 5. Boxcar ends too frequently are bowed and out of plumb, requiring excessive dunnage and labor to square up.
- 6. Excessive damage in transit, resulting from longer trains and high speed movements, points to the need for improvements in coupling underframes and suspension for smoother riding and less sway in transit . . . also, for increased ability to absorb impacts during switching, stopping and starting.
- 7. The report recommends universal adoption of fastening or tie-down devices as a permanent part of railway boxcar equipment. These should be made flush with or below level of floor and/or side walls.•

(Resume Reading on Page 75)



Circle No. 29 on Card, Facing Page 69, for more information



HOW ANTHONY LIFT GATE cuts costs for STATE FARM INSURANCE COMPANIES

*Saves manpower and time with deliveries of equipment

Until recently, it took four maintenance men to move a desk from the State Farm warehouse to the State Farm office building. Now, only two men do the same job in less time. The difference is the addition of an Anthony Lift Gate on the back of State Farm's trouble-shooting truck. Now making daily deliveries for State Farm, the Anthony Lift Gate has already paid for itself several times over.

It provides the most efficient method of loading and unloading... the most economical way to move all types of equipment 4½ ft. up and 4½ ft. down at the back of a truck.

Now available for capacities up to 4000 lbs., the Anthony Lift Gate gives unmatched performance. Just one lever controls all gate operations from either side of the truck. Gate automatically stops if driver takes hand off lever. It will not operate if overloaded and cannot possibly crash the load. Many other features. Descriptive literature is available at no obligation.

Buy the tail gate that has the service

Anthony Distributors are located from coast to coast ready to help you solve your delivery problems. Write today for a complete Anthony Distributor list.

ANTHONY

TO LOWER

5-POINT PLAN

DELIVERY COSTS

- Increase the number of deliveries and reduce fixed costs per delivery.
- Strengthen reputation for faster, improved service.
- Increase earning time of trucks and earning power of men.
- Cut standing time waiting for consignee help.
- Reduce the danger of damaged goods (and disgruntled consignees).

ANTHONY COMPANY

STREATOR, ILL.

Circle No. 30 on Card, Facing Page 69, for more information

Within the





By Leo T. Parker Legal Consultant, Distribution Age

TRANSPORTATION

Can an employer avoid paying minimum wages by making a written contract with an employe?

An official of a transportation company asked whether or not an employer can avoid paying wages specified by the Fair Labor Standards Act by having its employes organize a business under which it provides contract services for the employer. I located a higher Federal court case which clearly answers this legal question in the negative. This court held that an employer cannot avoid paying minimum wages specified by the Fair Labor Standards Act merely by making written contracts with an employe who assumes to be the proprietor of a business which serves the employer.

For illustration, in M—— v. S——Transportation Co., 228 Fed. (2nd) 124, the testimony showed facts, as follows: A man named B—— signed a written contract with the S——Transportation Co. to act as the R—— Protective Service. The latter agreed to furnish a night watch service for the terminal of the S——Transportation Co. B—— had no real protective service with other transportation companies, as only B—— and his relatives acted as watchmen.

In subsequent litigation, the higher court held that B—— is an employe and must be paid minimum wages specified by the Fair Labor Standards Act, saying:

"A watching and protection service may constitute an independent contract but we hold this to be employment and as such in violation of the Act. Was the night watchman (B——) actually an employe despite the title and garb of independent contractor? We think an examination of undisputed evidence demonstrates that except for the label, he was an employe in a very real sense."

This higher court went on to explain that safekeeping cargo and the needed trucks, trailers, terminals, and facilities for the transport is an indispensable phase of the transportation business.

Are insurance policies rendered void by unintentional acts of the holders of the policies?

Contrary to the knowledge of a majority of officials of transporting or trucking companies, a large percentage of insurance policies are rendered void by unintentional acts of the holders of the policies. For instance, a higher court has held that a trucking company which keeps records or books likely to be destroyed, or stolen, violates its insurance policy and therefore forfeits the right to collect insurance, in case of a loss.

For illustration, in E—v. N—, 61 N. W. (2d) 172, it was shown that a company held a burglary insurance policy which provided, as is usual in such policies, that the insured must keep its records in such manner that the insurance company could accurately determine the amount of a loss which may be incurred.

The testimony showed that the company kept money in its safe and made notations on the envelopes indicating the amount of money in the different envelopes.



"Next time you want tank corrosion checked, would you mind emptying the car first?"

One day unknown persons forcibly entered the office, breaking open two safes and taking money therefrom. At the time of the burglary there was in force and effect the above mentioned insurance policy issued to the company providing for the indemnification of the assured for the loss of money and securities caused by wrongful abstraction, burglary, or robbery within the premises.

In subsequent litigation the higher court held that these notations on the envelopes did not constitute a proper record within the burglary policy. Hence the insurance company was not required to pay the loss. The court said:

"Plaintiff (Company) should have anticipated that if the money was stolen from the safe the envelopes containing it would likewise be taken, so that no record would remain."

This court, also, explained that an insured trucking company renders its insurance policy void if it does not comply with the requirements of the insurance policy to keep its books in such a location where they will not be likely to be destroyed by fire or theft. In other words, the purpose of the record clause in the usual insurance policy is to enable the insurance company to verify a loss alleged by the insured. Failure of the trucking company to comply with these provisions in the insurance policy renders the policy void.

The same relative adverse law is effective with respect to warehousemen, and trucking companies, which safekeep a patron's merchandise. While the warehouseman or trucking company is required by law to exercise only ordinary care to protect the merchandise against loss by theft, fire and the like, yet if it breaches its implied or expressed contract to store the goods in a particular location it automatically becomes an insurer.

In other words, the various courts have held that a warehouseman or trucking company is liable as an insurer against loss or injury to stored goods if it fails to store the same in the building, or the particular location in the warehouse, in which the patron is led to believe or directed that his merchandise be stored. The same law

is effective if the storer breached an expressed or implied agreement to store goods in a certain room.

For illustration, in a leading case (99 NE 189) it was shown that an owner of goods directed a warehouseman to store certain merchandise in a particular room in the warehouse. The warehouseman impliedly agreed to store the goods in this room, but without knowledge of the owner, the warehouseman stored the goods in another room which was equally safe.

One night the warehouse caught fire and the stored merchandise was destroyed. The owner filed suit for the full value of the goods. Although the fire did not result from negligence of the warehouseman or his employes, the higher court held the owner of the goods entitled to recover the actual value of the destroyed goods, saying:

"Fire is an ordinary and frequent agency of destruction or injury, and safety, as against it, was in the contemplation of the parties when they agreed that the property should be stored in the specified room. Had the property been there stored, the plaintiff (owner) would have assumed all the risks of injury to it, except those ordinarily imposed by law upon the defendants (warehouseman) as bailee . . . The defendant (warehouseman) violated his agreement, and therefore is liable."

In still another case (128 So. 277), the higher court held a warehouseman liable for loss of furniture by fire where it was shown that he removed the furniture from the warehouse, without knowledge of the owner, to wrap and crate it. In this instance, also, it was proved that the warehouseman had exercised reasonable care to prevent occurrence of the fire. This court said:

"The warehouseman was, in no sense, responsible for the fire, nor was he guilty, after the fire started, of any negligence in failing to save the furniture. We think that defendant (warehouseman) removed the furniture from the place agreed upon for its storage at a time when it had no authority whatever to do so, and thereby actively violated its contract."

Failure fully to comply with provisions of an insurance policy renders the policy void, so far as the insured may collect for a loss. Moreover, the fact that non-compliance with an insurance policy is unintentional does not render the policy valid.

For illustration, in G—v. C—I—Co., 147 Fed. (2d) 6, it was shown that a corporation held a fire insurance policy for \$298,000 which covered buildings and stored goods therein. The policy contained a clause to the effect that the corporation would give immediate notice in writing to the insurance company of any loss or damage, and would furnish a complete "inventory" of the destroyed, damaged and undamaged property, stating the quantity and cost of each article, and the amount of insurance claimed thereon.

The company had a fire loss and immediately sent to the insurance company a written "estimate" showing a total amount of loss of \$119,790.79. In this account of estimated loss the company included 43,194 cases of bottles valued at \$29,717. Later the testimony proved that these cases of bottles were not stored in the building when the fire occurred.

The higher court held that because the corporation included in its estimate 43,194 cases of bottles not destroyed, the insurance company was not liable for payment of the actual loss. This was so although the court admitted that the company did not wilfully or intentionally defraud or attempt to defraud the insurance company. See 186 Fed. (2d) 357, in which the higher Federal court approved this verdict.

Can word-of-mouth testimony vary the meaning of a written transportation contract?

According to a late higher court decision a written contract "stands on its own feet" and word-of-mouth testimony cannot be used to contradict or vary the meaning of a written contract.

For illustration, in H—v. M—and Trucking Co., 296 Pac. (2d) 476, the testimony showed facts, as follows:

The M— and Trucking Co. signed a written contract with one H— for performance of certain trucking services. Later one of the contracting parties contended that the written contract was not conclusive and attempted to introduce before the court certain word-of-mouth testimony which would modify the terms of the written contract. The higher court refused to listen to the word-of-mouth testimony, and said:

"Where the terms of an agreement are plainly stated in writing without ambiguity, the parties' intention must be ascertained from the language used in the written contract and word-of-mouth evidence is inad-



"Our new physical distribution specialist is a wizard"

missible to show such intention. Word-of-mouth evidence never will be taken as to the intent of the parties unless there is uncertainty and ambiguity in the written contract.

"In support of the legal rule that where the terms of a written agreement are plainly stated, without ambiguity, the intention of the parties must be ascertained from the language used, and that word-of-mouth evidence is wholly unadmissible. See the following cases: F— v. C—, 44 N. M. 499, E. I. D—— D—— & Co. v. C——R—— Co. 8 Cir., 64 F. (2d) 224, F—— Co. v. A—— Hotel Co. 37 N. M. 456, People v. O——, 161 P. 1110, and A—— v. R——, 103 P. (2d) 119."

How can warehouse know if person employed is legal employe or independent contractor?

A convention member asked this legal question: "How can our warehouse company know for certain whether a person we employ is a legal employe or independent contractor?"

Quite obviously, the answer to this legal question is important to a ware-houseman, and for many reasons among which is that an injured independent contractor may sue and recover damages directly from the warehouseman whereas a legal employe must accept compensation payable from the state controlled funds.

Modern higher courts consistently hold that the primary and important test in determining this question is whether the employer has the right of control over the employe. Generally speaking, if the employer has a right of control, the employe is a legal employe. On the other hand, the general rule is that a professional man, such as a lawyer, doctor, architect or supervising engineer is an independent contractor. Last month a higher court upheld this latter rule of law although the professional employe was under control of the employer.

For illustration, in I— Warevouse v. L—, 282 S. W. (2d) 846, the testimony showed facts, as follows: A man named L——, was employed by the I—— Warehouse to draw plans for a new warehouse. L—— was subject to the company's orders, control and instructions.

In subsequent litigation, the higher court held that L—— was an independent contractor, and said:

"In the present case L— was hired because of his professional skill. Generally, any specialized or professional services rendered other than by one engaged for fixed hours at a fixed recompense are not within the compensation act. After considering all the applicable factors it is obvious L— was hired as an independent contractor."

Furniture Warehousemen Spotlight Performance

Record company member representation attends Annual Meeting featuring review of the "Master Plan," report on Public Law 245, and law forum

THE 36th Annual Meeting of the National Furniture Warehousemen's Association drew the largest company member representation in the organization's history. Registration included members from Canada, Hawaii and England. The meeting, with its theme "Spotlight on Performance," was held the week of March 17th at Palm Beach Biltmore Hotel, Palm Beach, Florida.

Among several outstanding attractions of the meeting was the first progress review of the association's year-old, three-phase "Master Plan." Another feature was a progress report by government officials of Public Law 245, and an open implementation forum of the law by members of the Industry Advisory Committee and Joint Services Committee.

The association's general business matters were conducted in two sessions. President J. C. Aspinwall, Jr., opened the first business session on March 18th by summing the industry's problems and the association's progress toward their solution, concluding with an inspiring outlook for the near future. This was followed by reports of NFWA activities during the past year, presented by Edward D. Byrnes, executive director, and Donald R. Markham, assistant executive director.

The second business session, on the last day of the meeting, was highlighted by a talk, "Financing Warehouse Construction," by Luther P. Waring. Then came the annual reports of the Board of Directors and other officers. The session was concluded by election of officers.

Croul Elected President

William J. Croul, Riverside Storage and Cartage Co., was elected president. Two new vice president-regional directors also were



William J. Croul

elected: Luther P. Waring, Americon Storage Co., serving the eastern division; Joseph A. Hollander, Hollander Storage and Moving

Co., for the central division. Two others were re-elected to the vice president-regional manager office: J. W. C. Wright, Jr., Globe Storage Co., southern division; Daniel P. Bryant, Bekins Van and Storage Co., western division.

Robert W. Fernstrom, Fernstrom Storage and Van Co., was elected secretary. George A. Julin, Werner-Kennelly Co., was reelected treasurer.

Named as directors for three years were: John F. Christie, Jr., Ryan and Christie Storage Inc.; W. N. McKinney, American Transfer and Storage Co.; Alexander H. Naish, The "Al" Naish Moving and Storage Co.; Robert S. Reis, City Transfer and Storage Co.

The "Master Plan"

After the opening session. George Winkler, Jr., started the first of a series of reports on the NFWA "Master Plan." As chairman of the Trustees of the National Moving and Storage Technical Foundation, a non-profit organization incorporated to finance the three-phase plan, he gave an encouraging progress report. Detailed reports on the progress and future of the plan were submitted by other trustees.

Engineering

John K. Gund discussed the engineering aspects. He dwelled on the cooperation needed between industry members and the new trained field representatives in the matter of supplying detailed technical data. He visualized an ultimate master technical information center from which the industry could draw solutions to its current problems.

Research

Martin B. Holt read a report on the plan's research phase, prepared by his father Herbert B. It stressed the need and advantages of research in the industry. It also reported in detail on the research program recommended by the Armour Research Foundation of Illinois Institute of Technology. This was divided into two parts: Short range (four to six months) and long range (10 months to a year).

The short range program included:

"1. A study of the industry, to be gathered from typical warehouses throughout the country.

"2. Inventory of the out-going dollar, to be gathered from the industry.

"3. Analysis of areas for future research.

"4. Assignment of priorities to specific projects."

Education

The third-phase — education was covered by Chester E. Bradley. He stated the basic objectives (Please Turn to Page 124)

United Van Lines Re-elect John K. Gund President

John K. Gund, president of Lakewood Storage Co., was re-elected president of United Van Lines, Inc., at the annual stockholders' meeting in St. Louis.

William A. Strauss, of Brooks Transfer and Storage Co., was elected first vice president and Griswold B. Holman, of George B. Holman and Co., Inc., was chosen secretary.

Continuing in office are William S. Kutchbach, of Columbus, Ohio, treasurer, and W. W. Warren, of Oklahoma City, board chairman.

The Mayflower Warehousemen's Association will hold its 25th Anniversary Convention in Seattle, Wash., May 14-18.

Farkas Honored by NYM&WA

Morris Farkas, General Moving & Storage, Inc., New York City, was honored by about 100 organization members at the annual meeting of The Movers and Warehousemen's Association of Greater New York, Inc.

The following officers were elected: Barrett G. Gilbert, Gilbert Storage Co., Inc., president; I. Arnold Weissberger, Liberty Moving and Storage Corp., vice president; Frederick J. Schramm, Chelsea Fireproof Storage Warehouses, Inc., treasurer; and Charles D. Morgan, Morgan and Brother Fireproof Storage Warehouses, Inc., secretary.

Van Service Meeting



Burnham's Van Service held its seventh annual convention at Columbus, Ga., recently. Ian Stuart (second from left), educational director, Southern State Industrial Council, was a featured speaker. Talking with Stuart are (left to right) Otis Burnham, L. R. Burnham, and B. Leroy Burnham

Warehouse SPOTLIGHT



Men in the Spotlight

Robert C. Cavanaugh—elected vice president of Monumental - Security



Storage Co. of Baltimore following a merger which created the new firm. Taking part in the merger are Monumental Storage

and Carpet Cleaning Co. and the Security Storage Co. of Baltimore. The merger became effective April 1, according to Lawrence A. Naylor, Jr., president of the new firm and former president of Monumental.

Charles W. Barth — elected vice president and director of Sarasota Transfer and Storage Co., Sarasota, Fla

Edwin H. Parkir, Jr., and Charles F. Hulbert—appointed regional managers for North American Van Lines, Inc. The former is assigned to the New England States with headquarters at Natick, Mass., and the latter will serve Oklahoma and Texas from a Dallas headquarters. Jim F. Arrington, Jr.—named to the legal staff of North American Van Lines, Inc.

Thomas W. Flock—appointed eastern district manager of Allied Van Lines, Inc., with headquarters at Secaucus, N. J. Leo Theodore Bird—of Beverly Hills Transfer & Storage Co., selected Allied Van Lines' first Driver-of-the-Month.

Wilbur R. Anderson—elected vice president-general manager of Bekins Van & Storage Co. Lucien W. Shaw—re-elected secretary. John Schmidt—elected treasurer.

Jim Poe—named to the sales staff of Mooney Moving & Storage Co., St. Joseph, Mo.

-DA-

Illinois Warehousemen's Association will meet April 18-19 in the St. Nicholas Hotel, Springfield, Ill.

Paul Amon Becomes President Of Massachusetts Association

Massachusetts Warehousemen's Association recently elected Paul L. Amon, Atlas Terminal Stores, Inc., as president. Also elected were: Carlton B. Payson, Farnsworth Merchandise Storage Co., vice president; Leslie B. Morash, Service Warehouse Co., treasurer; and James L. Haskell, Boston Tidewater Terminal, Inc., secretary.

Warehouse Briefs

Pete's and Purcell's Transfer and Storage Co., of Bloomington, Ind., has announced plans for expansion following a change in ownership. Joseph M. Storms, a partner and general manager, has purchased William Purcell's interest in the business.

Youngblood Van and Storage Co., Inc., has completed occupancy of its new brick, steel, and concrete warehouse and offices at Valdosta, Ga.

D. H. Overmyer Warehouse Sales Co. held its annual sales meeting in Toledo, Ohio. Representatives attended from offices in Toledo, New York, Chicago, Atlanta, and Los Angeles.

-DA-

American Red Ball Transit Holds Annual Convention

Several hundred members attended the seventh annual convention of the American Red Ball Transit Co. held in Chicago.

Discussions included new packaging features, a new dispatch system, and the certified performance program.

BIRMINGHAM, ALA, I

Established 1918



American Transfer & Warehouse Co., Inc. Birmingham 2, Ala. 881 N. 19th Street

Merchandise and Household Goods

Warehouse, Concrete and Sheel Construction—
150,000 sq. ft.—sprinklered. ADT Alarm. Private
siding, Frisco railroad. Pool Car Distribution and heavy machinery hauling. 50 Trucks of



BIRMINGHAM, ALA. 1880—Seventy-seven Years of Service—1957

HARRIS WAREHOUSE CO.

. 8 South 13th St., Birmingham .

Merchandise and Household Goods

. STORAGE . CARTAGE . DISTRIBUTION . FORWARDING Pool Cars Handled

Member of A.C.W.-A.W.A.-N.F.W.A. Agents for Allied Van Lines, Inc.

BIRMINGHAM, ALA.

SOUTHERN BONDED WAREHOUSE 2 Finley Avenue, West * Birmingham

Telephone



- Unlimited Floor Load—24' Ceilings
- . Light, Dry, Airy-One-story
- Sprinkler System—fully Automatic
- Fully-bonded Warehouse
- Pool Car Distribution



- Palletized Loading Trucks for Local Delivery
- 14 Loading Docks
- 7 Railroad Sidings
- 45.676 Square Feet Floor Space

ATLANTA WAREHOUSE: 367 John Street, N.W., Atlanta 13 • JAckson 4:3421

CHICAGO: 519 West Roosevelt Road, Chicago 7 • CAnal 6-5742 MEMBER AWA . NWS

BIRMINGHAM, ALA.

STRICKLAND TRANSFER & WAREHOUSE CO.



112 South 14th St., Birmingham

General Merchandise Storage and Distribution Pool Car Service a Specialty-Motor Truck Service Centrally Located-Free Switching from All R.R.s

DOTHAN, ALA. [

SECURITY BONDED WAREHOUSE

500-501 East Commerce Street POOL CAR DISTRIBUTION

SERVING S.E. Alabama S.W. Georgia N.W. Florida

Receiving—STORAGE—Handling.
Motor Freight Service to all points.
6-car Private Siding. Reciprocal Switching.
Efficient—Conscientious Branch House Service.

PHOENIX, ARIZONA

MOVING & WARFHOILS

Established 1800 Box 2033 PHOENIX Teletype Px262

- Offering complete warehouse service for all types of general merchandise.

- Palletized Operation
 Peol Car Bistribution
 Inside Truck Loading Field Warehousing

 Private Sidings —
- · Free Switching 20 Car Capacity Consign shipments via S.Fe - S.P.
- terage and Nationwide moving of household goods.

Represented by American Chain of Warehouses Affied Distribution Member American Warehousemen's Association



31

LITTLE ROCK, ARK.

Represented by Allied Distribution, Inc.



COMMERCIAL WAREHOUSE CO. 300-324 RECTOR STREET LITTLE ROCK, ARK.

LITTLE ROCK, ARK,

APKANSAS LARGEST WAREHOUSE Merchandise and Household Storage



FIREPROOF-CONSTRUCTED

Pool Car Distribution-Agent, Allied Van Lines

TERMINAL WAREHOUSE CO.

Member American Warehousemen's Association American Chain of Warehouses

LITTLE ROCK

ARKANSAS



ALAMEDA, CAL. COMPLETE WESTERN On San Francisco Bay DISTRIBUTION



General Merchandise Storage • Pool Car Distribution . Storage-in-Transit . Trucking, Car Loading • Private Office Space • Central Phone Service • Bulk Storage Facilities • Industrial Sites

ENCINAL TERMINALS & WAREHOUSES ALAMEDA and SAN LEANDRO, CALIF. • P. O. Drawer A, Alameda, California

LOS ANGELES, CAL

Commercial (Warehousing and Distribution



LOS ANGELES, CAL.

MEMBER OF A.W.A.

PACIFIC COAST TERMINAL WAREHOUSE COMPANY

4802 LOMA VISTA AVE. LOS ANGELES 58 MERCHANDISE STORAGE AND DISTRIBUTION Located in the heart of the Wholesale District

LOS ANGELES, CAL. STABLISHED 1918

PACIFIC COMMERCIAL WAREHOUSE, INC.

923 E. 3rd St.

GENERAL MERCHANDISE STORAGE
POOL CAR DISTRIBUTION STORAGE IN TRANSIT
DAILY HARBOR, LOCAL AND STATEWIDE HAULING
EXPERIENCED, EFFICIENT, BONDED PERSONNEL
10 Car Siding on A.T.AS.F. Railway
Sprinklered-A.D.T. Protected

LOS ANGELES, CAL.

Member of AWA-LAWA-ColTA

SIGNAL TRUCKING SERVICE, LTD.

Warehouse Division
4455 Fruitland Avenue, Los Angeles 58, Culifornia and 315 Marine Avenue
Wilmington, Culifornia

LUdlow 3-3171 - NEvada 6-1851

Teletype Los Angeles 103

MERCHANDISE WAREHOUSING & POOL CAR DISTRIBUTION Represented in New York by H. C. Wall, 233 Broadway, N.Y.C.

LOS ANGELES, CAL.

1817-1855 INDUSTRIAL ST., LOS ANGELES 21

Star Truck & Warehouse Co.

COMPLETE FACILITIES EFFICIENT SERVICE

Storage Distribution Drayage
256,000 Square Feet 120 Pieces Motor Equipment
Represented by Distribution Service
New York Chicago San Francisco

OAKLAND, CALIF. SACRAMENTO, CALIF.

GENERAL MERCHANDISE



SAN DIEGO CAL

COMMERCIAL WAREHOUSING. LOCAL CARTAGE

Largest commercial warshouse in San Diege area. Santa Fe spur, free switch-ieg any R. F. Sferk lifts. 105.000 sq. ft. Qr. Sprinklers. E. B. GOULD, Mgr. P.O.B. 13056, Z. 13, San Diege, Calif. GRiddev 7-3161

NEWA VAN & STORAGE CO. AWA LET LYON GUARD YOUR GOODS

SAN FRANCISCO, CAL. T

HASLETT WAREHOUSE COMPANY

680 BEACH STREET, SAN FRANCISCO 9

Largest and most complete storage and trucking service on the Pacific Coast Operating in San Francisco, Oakland, Stockton and Sacramento

Member: American Warehousemen's Assn.
American Chain of Warehouses, Inc.

SAN FRANCISCO, CAL. [

SUtter 1-3461

SAN FRANCISCO WAREHOUSE CO.

COMPLETE WAREHOUSE SERVICE

500,000 Sq. Ft.

General Merchandise United States Customs and Internal Revenue Bonded Storage Draying and Pool Car Distribution Office Accommodations and Telephone Service



605 THIRD ST., SAN FRANCISCO 7 **Teletype SF933**

Member American Warehousemen's Assn. Distribution Service, Inc.

Colorado Springs, Colo. SIERRA MADRE OF LAS ANIMAS

TRANSFER G STORAGE CO.

g, pecking, skip

se, Winch, Heavy healts

Agent ALLIED Van Lines





to over 2,000,000 people In the Rocky Mtn. Empire

Deliver what they west... WHEN THEY WANT IT ... by worshoosing at NORTH DENVERI

L/OD possibile customers in all devotions from Dispray look to this clay for their dully confi, Manager. This close points up the need to travelenate roach or NORTH DENYER. And for Manager. To learner HORTH DENYER offers over helf a customy of travelensing And, while very control accelenation for colons, with gained our own scene of volumble Mr yours for the cubing. So, why got write set.

SETTED VET ... PELITYPE ON ASS...

NORTH DENVER TRANSFER & STORAGE COMPANY OFFICE 2101 MARKET ST. DENVER, COLORADO

a Ransass



PUEBLO, COLO. Member of May. W.A.—A.W.A.—Colo. W.A.



WAREHOUSE AND TRANSFER CO., INC.

200 SO. SANTE FE AVENUE dern Sprinklered Fireproof Building—Freight rwarding and Distribution — Household and PACKING AND SHIPPING



PUEBLO, COLO.

128-130 SOUTH MAIN TRANSFER &

- STORAGE CO.

Preight Fore *AGENT ALLIED VAN LINES



MARTFORD, CONN.



100,000 sq. ft. warehousing space: 8-car private siding; complete ADT fire, burglary protection; 100% sprinklered warehouse. Teletype H.F. 287 or write . . .

Geo. E. Dewey & Co. II Donald St., Hartford S. Cons.

HARTFORD, CONN. I

U. S. CUSTOMS BONDED WAREHOUSES

ARTFORD DESPATCE AND WAREHOUSE CO. INC.

- * Public Storage * Pool Car Distribution
- * 100% Palletized * ADT Protective Service
- * Prompt Delivery Via Own Fleet

MEMBER

ALLIED VAN LINES, INC.

Moving — Packing — Storing — Shipping

NEW HAVEN, CONN. Member of AWA-ConnWA-New Haven Coff

THE ATLANTIC BONDED WAREHOUSE CORP.

114 Ferry Street P. O. Box 33 New Haven 1, Conn. Merchandise Storage—U. S. Customs and Internal Revenue Bonded— Merchandise storage—U. S. Customs and internal Revenue Consolidation—Storage and Distribution—Inventory Control —Telephone and Clerical Service—Brick and Concrete Build-ing—Sprinklered—Heated—Private Siding NYNH&H R.R.— All Trucking Facilities—Pool Car Distribution.

NEW HAVEN, CONN.

M. E. KIELY, Pres. 335 East Street, New Haven 2,

STORAGE

DISTRIBUTION

TRUCKING

Private Siding Heated Space Modern Fireproof Warehou

Members: Connecticut Warehousemen's Assn. and Associated Warehouses, Inc.

NEW HAVEN, CONN.

THE COMPANY established 1860

Complete Storage and Distribution Service Merchandise--Household Goods AWA-NFWA-AVL agents

DOVER, DEL. T

Mamber of AWA-NEWA

Wm. St. & Penna, R.R., Dover, Delaware Phone-Dover 3141-5949

GENERAL MERCHANDISE and HOUSEHOLD GOODS STORAGE

120,000 sq. ft. 80,000 sq. ft. heated Lease rentals of whole buildings or parts

15 car private siding Storage in transit Pool car distribution Inventory control Anants for Allied Van I Inc.



WASHINGTON, D. C. T

Telephone ADams 2-2883

KANE WAREHOUSE COMPANY 8th & Franklin Streets, N. E. Washington 17, D. C.

Complete Facilities for Commercial Storage and Distribution





WASHINGTON, D. C.

H. H. SPICER, JR., Mar.

THE TERMINAL STORAGE COMPANY OF WASHINGTON

First, K and L Streets, N. E., Washington 2

Large buildings of modern construction, total floor area 204,000 square feet, of which 109,000 square feet is of fireproof construction. Storage of general merchandise. struction. Storage of general merchandise. CONSIGN SHIPMENTS VIA B. & O. R. B. Heated rooms for protection against freezing

JACKSONVILLE, FLA. [

LANEY & DUKE STORAGE WAREHOUSE CO., INC.

Most Centrally Located Warehouse In The City

Reinforced concrete building with private siding on A. C. L. R. R., free switching.
 Clean, dry general storage and cooler facilities, modern equipment.
 Low Contents insurance Rate. Pool cardistribution and prompt local truck deliveries.



1560 Jessie St., Jacksonville, Fla.

934 & MICHGAN AVE. ALLIED DISTRIBUT

JACKSONVILLE, FLA. [

M & M Terminal Warehouse Co.

800 East Bay Street

Southern Terminus Willis Barge Line

Facilities: 125,000 sq. ft., 40 car Private Siding SAL, 25 truck doers, Watshman service. Deep water to 30 ft. Service Features: Mdsc. Storage, Peol Car Dist. Stg. in Transit, local deliveries, mobile crame, 20 tome, 100% palistized. Member: SEWA, JWA, ADI

JACKSONVILLE



150,000 sq. ft. ACL, SR. Every desired warehousing service.

OVERMYER WAREHOUSE 520 CHAMPION

Phone: EL 5-2642



JACKSONVILLE, FLA.

Member: AWA-SEW&MA-JWA

PENINSULAR WAREHOUSE COMPANY

1507 Industrial Blvd.

Merchandise Storage—Pool Car Distribution—Trucking—New Reinforced Concrete Buildings—Low Insurance Rate—14 Car Siding — 15 Truck Platform — ADT Protection — Cooler Space — Air Conditioned Office Space — Completely Mechanized — 67,000 Square Feet — Completely Mechanized — 6457. New York phone: Murray Hill 9-7645.



JACKSONVILLE, FLA. | FLORIDA'S LARGEST WAREHOUSE

Union Terminal Warehouse Company

700 East Union Street, Sta. G

Merchandise Storage—Custom Bonded—Pool Car Dis-tribution—Reconsigning—Trucking Service—Trackage 52 Cars—Reinforced Concrete—Sprinkler System— A.D.T. Service—Insurance Rate 12 Cents. Rental Compartments—Sub-Postoffice Members A.W.A.—A.C., or-W.—J.W.A.

MIAMI, FLA. I

Phone: TU 8-6429

A. O. TRANSFER & WAREHOUSE CO. INC.

3055 E. 11th Ave.

Higlegh, Fla.

HOUSEHOLD & COMMERCIAL STORAGE POOL CAR DISTRIBUTION

PRIVATE S.A.L.RR SIDING—3 CARS
SINGLE TAX INVENTORY AREA
LOCAL & LONG DISTANCE MOVING

MIAMI, FLA. [

INTERNATIONAL BONDED WAREHOUSE CORP.

U. S. CUSTOM BONDED

Member of American Warehousemen's Association and Southeastern
Warehousemen's Association, Negotiable Warehouse Receipts

MERCHANDISE STORAGE

FEC RR SIDING-6 CARS 601-611 S.W. 8th St. (36)

Tel. FR 4-1208

MIAMI, FLA.



THE SEVEN

MOVING . STORAGE . EXPORT PACKING RR SIDING

To and From Everywhere 20 N.E. 11th ST. • MIAMI 32, FLORIDA PHONE 82-7503

TAMPA

200,000 sq. ft. ACL, SAL. Every desired warehousing service.

OVERMYER WAREHOUSE 1139 ELLAMAE

Phone: 2-8027



ATLANTA, GA. [

American Bonded Warehouse A filiated Southeastern Bonded Warehouses, Inc.

"Better Warehouse Service"

651-663 Humphries St., S.W.-Sou. R. R. Merchandise Warehousing Pool Car Distribution

Sprinklered A.D.T. Burglar Protection A.W.A.



ATLANTA, GA. [

Member: A.W.A.

Lehigh Warehouse & Transportation Co.

Glen Street & Murphy Ave.
Tel.—Walnut 5477

Tel.—Walnast 5477

Storage space over 100,000 sq ft. 14-car siding Central of Goorgia. Resiprocal
with all railreads. 8-truck slatform. Pool car distribution. Storage in
transit. Fully sprinklered completely mechanized, unlimited floor load. Insurance
\$1.6. Air conditioned (cooler space). Temporature controlled and heated space
swaliable.

ATLANTA

Best of Service

125,000 sq. ft. NC, STL. Every desired warehousing service.

OVERMYER WAREHOUSE

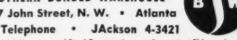
426 MARIETTA N. W.

Phone: MU 8-8686



ATLANTA, GA.

SOUTHERN BONDED WAREHOUSE 367 John Street, N. W. . Atlanta



- Unlimited Floor Load—24' Ceilings Palletized Loading
- . Light, Dry, Airy-One-story
- Construction Dry Sprinkler System—fully
- Automatic Three Fully-bonded Warehouses
- Pool Car Distribution

BIRMINGHAM WAREHOUSE: 2 Finley Avenue, West Birmingham . ALpine 1-0247

CHICAGO: 519 West Roosevelt Road, Chicago 7 . CAnal 6-5742

MEMBER AWA . NWS

• 27 Trucks for Local Delivery

• 209,000 Square Feet Floor

• 74 Loading Docks

Space

39 Railroad Sidings

SAVANNAH, GA. T

SAVANNAH

BONDED WAREHOUSE & TRANSFER CO.

WEST BAY STREET AT CANAL Post Office Box 1187

General Storage-Pool Car Distribution Field Warehousing—Sprinkler System

Members: AWA-AC of W

HONOLULU, HAWAII [

WHEN SHIPPING GOODS TO

HONOLULU

Consign to us and the same will be given our best attention.

Modern Concrete Warehouses. Collections promptly remitted.

Established 1900. Correspondence Solicited.

CITY TRANSFER COMPANY, LTD.

610 FORT ST., HONOLULU CARLE ADDRESS: LOVERING

HONOLULU, HAWAII

2 modern concrete warehouses Sprinkler systems throughout

lawest insurance rates 200,000 sq. ft.

Collections & Distribution Service





MERCHANDISE—HOUSEHOLD EFFECTS

HC&D MOVING & STORAGE

CAIRO, ILL. [

HUDSON WAREHOUSES

Merchandise Storage and Distribution Represented by Affiliated Warehouse Companies
105 W. Madison 5t.
Chicago 2; III.
Phone: STate 2-5190

Represented by Affiliated Warehouse Companies
36 W. 44th 5t.
New York 36, N. Y.
Murray Hill 2-8727

FOR FRIENDLY SERVICE CALL ...

Vinte WAREHOUSE COMPANIES 105 W. Madison St., CHICAGO 2 ST 2-5180 • Walter P. Taylor

CHICAGO, ILL

The Distributors' News Group

ALLIED DISTRIBUTION DIC.

274 SO. MICHIGAN AVE., WA 2.3547

11 WEST 42ND ST., PEn. 6-0967

CHICAGO

111

Henry Becker Western

CHICAGO, ILL.

THE TRADITIONAL INSIGNIA

STORAGE CO. 251-315 EAST GRAND AVE

Warehouse located two blocks east of Michigan Avenue. Walking distance blocks east Avenue. Wa from Loop. Ten car switch C&NW Ry. Tunnel service Splendid building. Low insurance rate.







Phone CLYDE E. PHELPS RAndolph 6-4457 FOR

STORAGE-COAST TO COAST-SERVICE MERCHANDISE WAREHOUSES IN 75 CITIES

ASSOCIATED WAREHOUSES, INC. 549 WEST RANDOLPH ST. . CHICAGO 6. ILL.

CHICAGO, ILL.

WARD CASTLE, President

CURRIER-LEE WAREHOUSES. Inc.

427-473 W. ERIE ST., CHICAGO 10

Complete Facilities for Merchandise Storage and Distribution

Member: Associated Warehouses, Inc.



CHICAGO, ILL. T

HEAVY INDUSTRIAL STORAGE

Switch track and crane facilities for handling heavy merchandise, steel, machinery, paper. BONDED AND LICENSED



7446 S. Ashland Ave. PRospect 6-4616

Chicago 36, III.

5 points to remember for complete warehousina distributing

service in

CHICAGO

SOUTH 5967 W. 65TH ST. NEAR THE LOOP 429 W. 14TH PLACE DOWNTOWN 433 W. HARRISON ST. ON THE WATERFRONT 3101 FAST 103RD ST. WEST 2750 W. 35TH ST.

PLUS THESE ADVANTAGES:

Modern buildings, low insurance; spacious switch tracks; ample truck loading doors; pool car distribution; storage in transit; cooler rooms; efficient handling equipment; private storage; office space; negotiable warehouse receipts; financing; fumigating facilities.

Crooks Terminal Warehouses, Inc.

CHICAGO 7 433 W. Harrison St. KANSAS CITY 1 1104 Union Ave.

Associated with Overland Terminal Warehouse Co. 1807 E. Olympic Bivd., Los Angeles 21 Member of the American Warehousemen's Association OFFERING COMPLETE BRANCH HOUSE FACILITIES Receiving /Storing /Marking / Weighing Reconditioning Shipping C O.D. /
Sight Drafts/Invoicing/Collections/Inventories/Freight Prepayments

CHICAGO, ILL. [

Member A. W. A.

Griswold & Bateman Warehouse Co. 1525 NEWBERRY AVE. CHICAGO 8

- · Modern Buildings.
- Low contents insurance.
- · Reshipping, city deliv-
- Vacuum fumigation of food stuffs, tobacco, etc.
- · Cooling Rooms.
- · Direct track connections with C&NW, B&O, Soo Line, PM, CGW, and B&OCT Railroad.
- Over Fifty Years of Warehousing Experience.

* Represented by CHICAGO 4 84 MCHICAGO 4 84 MCHICAG AVE. RELETED DESTRIBUTI Values CORRET

CHICAGO, ILL. [

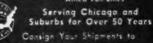
FIRE PROOF STORAGE--4 warehouses Packing — Crating — Shipping • NATION WIDE Long Distance Moving • Economical rates—Unexcelled service

GROVE STORAGE CO. INC.

4301 Cottage Grove Avenue Chicago's most progressive warehouse syste

CHICAGO, ILL

Member: N.F.W.A. Allied Van Lines



JOYCE BROS. Stge. & Van Co.

6428 N. Clark St., Chicago 26 ROgers Fork 4-0033 - Teletype CG-2196



CHICAGO, ILL.

68 Years of Reliable Service



LINCOLN MAYFLOWER WAREHOUSES Coast to Coast

4251-59 Drexel Blvd.

Chicago 15, Ill.

Storage—Packing—Shipping Local and Long Distance Moving

CHICAGO, ILL. T

Majestic Warehouses, Inc.

5210-30 South Wabash, Chicago 15, Ill.
Warehousing—Distributing—Cartage
15 Car Private Siding—Covered Dock Downtown
Area





MIDLAND

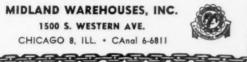
in Chicago, Illinois

A complete warehouse organization fully equipped to handle merchandise rapidly and economically with convenient locations for local trade and excellent transportation facilities for national distribution. Served by Chicago Junction Railway providing direct connections with thirty-eight railroads. Receiving station for Railway Express Agency on premises.

Inquiries Invited on Storage Office and Rental Requirements

MIDLAND WAREHOUSES, INC.

1500 S. WESTERN AVE. CHICAGO 8. ILL. . CAnal 6-6811



Largest **Best Located** Warehouses in Chicago

NORTH PIER TERMINAL in Chicago

NORTH SIDE

CENTRAL

SOUTH SIDE

WEST SIDE

Throw out your storage and distribution problems. Load them on us.

We are organized to schedule, route, trace, ship, inventory, store: do all paper work, dependably,

Largest, best located ware-houses in Chicago, where you get fast, efficient rail and truck and air, ship and barge facilities (reciprocal switching at every house), covered platforms, the quickest ins and outs.

(Office-Warehouse combination plan, too. A prestige location in Chicago's front yard.)

Chicago's front yard,)

MEMBER — American Warehousemen's

Assn., Ill. Assn. Mdse. Whsmen, Chgo.

Assn. of Comm., Ill. Chamber of Comm.,

U. S. Chamber of Comm.

EASTERN REP.: J. Leo Cooke Warehouse

Corp., Jersey City 2, N. J. Phone: OLdfield 3-5080. New York Phone: WH 3-5090,

WESTERN REP.: Encinal Terminals, Alameda, Cal. Phone: LAkehurst 3-1311.

Phone: W. W. Huggett, President, or S. T. Heffner, Vice President.



North Pier Terminal

Executive Offices: 444 N. Lake Shore Dr., Chicago 11 Phone: SUperior 7-5606

CHICAGO OVERMYER

WAREHOUSE SALES COMPANY Please contact MIDWEST SALES OFFICE Suite 2000, 6 N. Michigan Blvd.

Chicago 2. Illinois Phone: ANdover 3-3442



EXPERIENCE, COMPLETE FACILITIES. BUT BEST OF ALL PERSONALITED!

PACKERS makes you feel like a customer again! This family management firm has the true "responsibility factor" so essential to good service today!

Counted with all facilities, for all types of merchandise. . . Marking, re-packing, serting, secretarial services . . . the facilities and experience for your antire distribution ish.



George McConnell, Jr.



TERMINAL & WAREHOUSE CORP.

General Offices: 4000 Packers Ave., Chicago 9, Ill.
All Phones: Virginia 7-7972

Affiliated with Bridgeport Warehouse Corp. Railway Terminal & Warehouse Co. Illiana Transit

General Merchandise Storage and Space Leasing Area over 500,000 sq. ft. Cooler Storage Area 45,000 sq. ft. Rail Sidings on the Chicago Junction Ry. for 25-30 Cars.

Ample Truck Facilities—Central Location.



CHICAGO, ILL. 1

Close to the Loop District, these two cooperated warehouses offer quick, efficient and economical service to stores and distributors in Chicago and the Mid-West.

PRODUCERS WAREHOUSE CO. 344 No. Canal St. (6) C. & N. W. Ry.

THOMSON TERMINALS INC. 346 W. Kinzie St. (10) C. M. St. P. & P. R. R.

Prompt Deliveries

Advances Made

CHICAGO, ILL.

In Chicago na

SYKES COMPLETE WAREHOUSE and Distribution Service

Fully sprinklered warehouse building for merchandis exclusively, Centrally located — only 12 minutes from Complete warehouse service with personal supervision. Pool Car Distribution.

SYKES TERMINAL WAREHOUSE CO.

929 West 19th St., Chicago 8, III. Phone Monroe 6-2370



CHICAGO, ILL. I

RIVERSIDE WAREHOUSE

of Anchor Storage Co.

219 East North Water St., Chicago 11, Ill.
Telephone Mohawk 4-3325

GENERAL MERCHANDISE STORAGE

Centrally located one block east of Michigan Ave. Bridge Ten Car Private Siding C & N W Ry. Represented by Distribution Service, Ins.

Made AMERICAN WAREHOUSEMENS ASSOCIATION



WAKEM & McLAUGHLIN

Since 1886 The Midwest's most modern and complete warehousing facilities



400,000 square feet in 2 convenient locations

- SINGLE STORY OPERATION
- FULLY MECHANIZED
- INSIDE SIDINGS & TRUCK DOCKS
- . SPRINKLER & ADT PROTECTION
- LOW INSURANCE RATES
- MEMBER AMERICAN WAREHOUSEMEN'S ASSN.

W&M

write or wire for full details and services

WAKEM & McLAUCHLIN Incorporated

General Offices: 225 East Illinois Street

Chicago 11 SUperior 7-6828

CHICAGO, ILL.

Phone: Alistin 7-7300

VICTOR STORAGE & MOVING

4809 W. Lake St. Chicago 44, III.
for efficient, dependable warehousing in the
important Chicagoland market
GENERAL MERCHANDISE & FUNITURE
45,000 SQ. FT OF MODERN WAREHOUSE FACILITY
IMMEDIATE ACCESS TO TRUCK, RAIL, AIR
FILE HEIGHTS TO 18 FT.
FULLY INSURED, ADT PROTECTION
Exclusive Agents for American Red Ball Transit Co.

CHICAGO, ILL.

One of Chicago's Finest

A half million feet of modern warehouse space where you have every advantage for receiving, shipping and reshipping. Track space accommodates 360 railroad freight cars. 70 ft. covered driveways practically surround the clean, light and airy warehouse.

Located on the edge of Chicago's famous Loop and only one block from the mammoth new Post Office. Western Warehouse is in the heart of all business activity. Write for complete information.

WESTERN WAREHOUSING COMPANY

323 West Polk Street

Chicago 7, Ill.

DECATUR, ILLINOIS



E. ST. LOUIS, ILL. [

COLUMBIA TERMINALS CO.

(McMahon Division)

OFFICES: BROADWAY AT 7TH ST., EAST ST. LOUIS, ILL.
GENERAL HAULING—WAREHOUSING AND FORWARDING
WAREHOUSES ON SOUTHERN RAILROAD BELT LINE

EAST ST. LOUIS, ILL.

Telephone: Bridge 1-3723

MERCHANDISE WAREHOUSING

For The Carload Shipper
360,000 Sq. Ft. on One Floor
50 Car Private Siding on TRRA.
Storage In Transit Privileges
A.D.T. Burglar & Sprinkler Alarms
S. J. LUSBY, Vice-Pres.



G. J. NOONEY & CO.

(MISSISSIPPI AVENUE WAREHOUSE) EAST ST. LOUIS, P. O. BOX 26, ILL.

E. ST. LOUIS, ILL. I



MODERN - EFFICIENT - COMPLETE GENERAL MERCHANDISE STORAGE

- · Located five minutes from downtown St. Louis
- · 120,000 sq. ft. of storage space with unlimited floor load
- · Completely sprinklered and full time watch service

PRIVATE SIDING, 16-CAR CAP. POOL CAR DISTRIBUTION . PALLETIZED HANDLING STORAGE IN TRANSIT . BRANCH OFFICE SPACE 16-18 FT. CEILING HEIGHT

NATIONAL CITY PUBLIC WAREHOUSE

A Department of the St. Louis National Stockwards Co. NATIONAL STOCK YARDS, ILLINOIS

Phone Bridge 1-1704

Phone Upton 4-1190

JOLIET, ILL.

Telephones 4381 and 4382

Joliet Warehouse and Transfer Company Joliet, Illinois



MERCHANDISE STORAGE AND DISTRIBUTION Best distributing point in Middle West cated on five Trunk Lines and Outer elt which connects with every road enter-ing Chicago. No switching charges. Chicago Freight Rates Apply



JOLIET, ILL.

TRANSIT WAREHOUSE AND DISTRIBUTING CO.

90 CASSEDAY AVENUE, JOLIET, ILLINOIS
Phone—Joliet 5276

Merchandise Storage and Distribution

The only completely Palletized Warehouse in Joliet Pool Car Distribution Located on Rock Island R. R. Motor Freight Service
Free Switching

McCOOK, ILL.

- Licensed, Bonded
- Heated Facilities Railroad Switching
- Inside Truck Loading
- Sprinkler Protected
- **ADT** Protection

In Chicago's Switch- Route #46 and Joliet Ave., McCook, Illinois ing District

J. L. CARTAGE & WAREHOUSE

Specializing in food products and raw materials

P. O. Box C, Lyans, Ill., Phone: Lyans 3-7404-5

PEKIN, ILL.



Kriegsman in Pekin HUB OF 15 MAJOR RAILROADS

Central Illinois' Largest and Best IN-TRANSIT WAREHOUSE

Kriegsman Transfer Co. Pekin, III. . phone 6-4178 . Pekin, III. 8469

PEORIA, ILLINOIS



UNITED FACILITIES Merchandiso Warehousing

- Storage in Transit 210,000 sq. ft. Sprinklered
- 17 Car Private Sidings and Dock Free Switching to 12 Lines.

UNITED FACILITIES, INC.

2800 S. Adams Peoria, Illinois

Phone 4-5581



ROCKFORD, ILL.

Phone: Rockford 2-5509



and WAREHOUSING

711 So. Main St., Rockford, III.

Merchandise Storage · Pool Car Distribution . Rail Siding . Office Space Represented by Affiliated Warehouse Companies, Chicago-New York

VANDALIA, ILL. T

Telephone: 475

VANDALIA WAREHOUSE CORPORATION

1217-1331 W. Main Street

Merchandise Storage At Its Best

IMPERIATION OF THE PROPERTY OF

ELKHART, IND.

DISCO GENERAL WAREHOUSE

700 W. Beardslev Ave.

Phone 3-4725

100,000 sq. ft. Hested. Fully Sprinklered. ADT Protection. Very low insurance rate. Unlimited floor loads. Private rail siding N.Y.C. Truck docks, Palletized fork lift trucks. Storage in transit privileges. Cartage service.

EVANSVILLE, IND. T

Experienced Personnel — Prompt Service

Complete warehousing and distribution services—418,000 sq. ft. on one floor—Unlimited floor load—Spotting for 84 carloads at one time—Continuous truck doors—Low insurance rate.

Sprinklered—Palletized—Open yard storage



BEELER WAREHOUSE CORP.

1147 WEDEKING AVE.

Phone 5-3585

EVANSVILLE, IND.

Two of the more modern and largerware-houses in the heart of Evansville. Fire Resistant, Sprinklered, Private R. R. Sid-ings, Truck Dock Loading, Pool Car Dis-tribution, Efficient Personnel.





INGLE STREET WAREHOUSE COMPANY No. 2 Ingle Street,

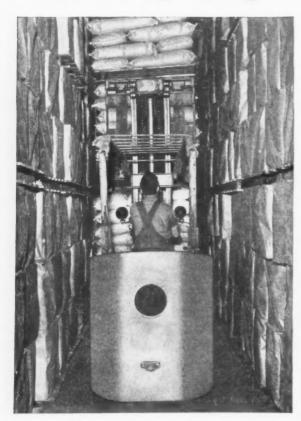
D. Phone: HA 4-1015

TERMINAL WAREHOUSE

915-19 Main Street,

NO TASK TOO GREAT L. D. Phone: HA 5-8201 NO DETAIL TOO SMALL

SAFE...SPEEDY cost-saving storage





Send Now for your free file copy of the Mead Johnson Terminal Facilities Manual

100,000 square feet of modern warehouse storage space . . . all one story, no floor load limit, completely palletized operations . . . low contents insurance rate of 11.4¢ per \$100 per annum. When you utilize Mead Johnson Terminal for your warehousing and distribution requirements you receive first class, economical and efficient warehousing service. These facilities are completely integrated with an all-inclusive distribution service . . river-rail-truck terminal, bulk terminals, warehouse and open yard storage . . . all detailed in the facilities quide shown at left.

MEAD JOHNSON TERMINAL CORP.

EVANSVILLE, INDIANA

Member: American Warehousemen's Association American Waterways Operators, Inc.



224 S. MICHIGAN AV. WAbash 2-3567

NEW YORK 18 1 WEST 42ND ST PEnn. 6-0967



SERVING INDIANA, ILLINOIS, KENTUCKY AND ADJACENT AREAS

FORT WAYNE IND

Telephone Anthony 3222



FORT WAYNE STORAGE COMPANY, Inc.

806-808 Hayden St., Fort Wayne 4, Ind. FIREPROOF AND NON-FIREPROOF BUILDINGS

m. Co. R. R.; Grand Rapids & Indiana R. R.; Wabash R. R. Private Sidings-Pool Car Distribution

FORT WAYNE, IND. 1

EXCLUSIVELY



Merchandise and Cold Storage

Modern Fireproof Warehouses — Centrally Located — P.R.R. Siding — Lowest insurance Rates — Pool Car Distributors—Local Cartage Service—Branch Office Service.

MITCHELL SALES & STORAGE, INC. 435 E. Brackenridge St., Fort Wayne 2, Ind. Warehouse Raceipts on Staple Commodities

FORT WAYNE, IND. 1

Members of MayWA-AWA



TIT'S STORAGE WAREHOUSE CO.

414 E. Columbia St., Fort Wayne 2, Ind.

MDSE. & HHG. POOL CAR DISTRIBUTION

New York City REPRESENTATIVES Chicage

MR. J. W. TERREFORTE

MR. H. H. BECKER

250 Park Avenue

YUKon 6-7722 TELEPHONE

HARTISON 7-3658

HAMMOND, IND.

Illiana Transit Whse. Corp.

CHICAGO SWITCHING DIST. I.H.B. RAILROAD CHICAGO SWITCHING DIST.

I.H.B. 200,000 sq. fl. single story buildings, low insurance rate—100% mechanized handling.

N. Y. Representative—AWC—MUrray Hill 2-8927
1334 FIELD ST., HAMMOD, IND.

BEST FOR STORAGE IN TRANSIT

AFFILIATED WITH GREAT LAKES WHSE. CORP.

& PACKERS TERM'L & WHSE. CORP.



INDIANAPOLIS, IND. 1

Phone MFIrese 2-4361

INDIANA TERMINAL & REFRIGERATING CO.

230-240 So. Penna. St., Indianapolis 4 Sprinklered Warehouses Office Rooms

General Merchandise and Cold Storage

Down Town Location with RR tracks in building
Eastern Representative: J. Lee Cooke Warehouse Carporation. New York phone: WH 3-5090

INDIANAPOLIS, IND. Telephone MEIrose 5-4436 MEMBER OF A.W.A.

Indianapolis Warehouse & Storage Co., Inc. 330 West New York St. Indianapolis 1, Ind.

Merchandise Storage . Private Sidings, N.Y.C. Pool Car Distribution . Office Space

Represented By
Distribution Service, Inc., New York City, Chicago, Ill.



INDIANAPOLIS, IND.

Telephone-MElrose 2-2525

MERCHANDISE STORAGE & POOL CAR DISTRIBUTION STORAGE-IN-TRANSIT

Locations, Anderson, Indianapolis
 Consign NYC, PRR—Anderson
 Consign IC—Indianapolis
 Lease space—Office space

MERCHANDISE WAREHOUSE CO., INC. 1414 S. West St., Indianapolis 25, Ind.

For more product information use the

READERS' SERVICE CARD

facing Page 69 to check your selections

INDIANAPOLIS IND

MElrose 5-5513

A Complete Service STROHM WAREHOUSE AND CARTAGE COMPANY 359 W. RAY STREET, INDIANAPOLIS

OPERATING 53 TRUCK UNITS

General Merchandise—Pool Car Distribution Modern Motor Trucking Service Check Out Service

All Merchandise On Check Out Cars Placed Merchandise On Check Out Cars I On Platform Ready For Delivery Reciprocal Switching, All Railroads Store Door Delivery and Pick-up for N. Y. C. R. R.





🗠 AMERICAN WAREHOUSEMEN'S ASSOCIATION

MISHAWAKA, IND. T

MISHAWAKA WAREHOUSE & DISTRIBUTING COMPANY

LaSalle Ave. at Elder Road, Mishawaka, Ind. GENERAL MERCHANDISE STORAGE & POOL CAR DISTRIBUTION

NYCRR & Grand Trunk RR
Storage—South Bend—Mishawaka Areo—Distribution

MUNCIE, IND. 1

Telephone AT 8-6677

GENERAL MERCHANDISE STORAGE

PRIVATE SIDINGS—35 CARS SERVICED BY—C&O—NYC—NICKEL PLATE LICENSED ICC INDIANA

OREN-SHIVELY WAREHOUSES

2700 So. Monroe St., Muncie, Ind.

CEDAR RAPIDS, IOWA

American Transfer & Storage Co.

401-411 FIRST ST. S. E. PHONE EMpire 2-1147 SINCE 1907

General Merchandise Warehousing and Distribution.

Cold Storage.

Modern Brick Warehouse, Sprinklered 80,000 Square Feet.

Siding on C. M. St. P. & P. Rd. Free Switching from Other Roads. Motor Freight Terminal.

Member of A.W.A.—N.F.W.A.



CEDAR RAPIDS, IOWA

Cedar Rabid TRANSFER & STORAGE CO.



MODERN WAREHOUSE AND TRUCK TERMINAL ON TRACKAGE Complete Facilities For Efficient Warehousing and Distribution of Merchandise DAILY SERVICE IN EVERY DIRECTION

DUBUQUE, IOWA COMPLETE DISTRIBUTION SERVICES

222,000 sq. ft. of floor space in buildings of brick-concretesteel construction. Chicago-Great Western R.R. siding with 10 car capacity. Free switching with Federal Barge Lines. Low insurance rates. Complete-Motor-Freight-Facilities.
Pool Car distribution—all kinds. Merchandise & Household Goods Storage, industrial and office space for rent.

DUBUQUE STORAGE & TRANSFER CO.

DUBUQUE, IOWA 3000 ELM ST.

Member of Iowa Warehouse Ass'n. Chicago Representatives: Associated Warehouses, Inc.



KANSAS CITY, KANSAS

- * Complete Merchandise Storage Service
- 400,000 Square Feet Modern Sprinklered
- Extensive Rail and Truck Facilities

G.K WAREHOUSES, INC.

Kansas Ave. & Railroad St., DRexel 6518-Kansas City, Kansas

KANSAS CITY, KANSAS T

TELEBUONE -- MAVEAUR 1.4900

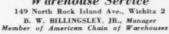
TRANSIT WAREHOUSES INC.

18TH AND KANSAS AVE., KANSAS CITY, KANSAS
GENERAL MERCHANDISE WAREHOUSE
BONDED—FIREPROOF—A.D.T. PROTECTED
GOOD TRUCK DOCK
Rock Island R. R.
Ramsas City Southern Ry.
Kansas City Terminal Ry.
KANSAS CITY, KANSAS TRADE AREA
KANSAS CITY, KANSAS TRADE AREA

WICHITA, KANSAS I

Brokers Office & Warehouse Co.

A Modern Distribution and Warehouse Service





WICHITA, KANSAS T

MERCHANTS Van & Storage Company



Sustem Member of NEWA-AVL



WICHITA, KANSAS | "We put the SERVE in SERVICE-

Ask Our Customers"
WAREHOUSE WITH AND DISTRIBUTE THROUGH:

SERVICE TRANSFER, INC.

FRANK BARTHELME, PRES.

Z East 21st St. • Wichita 2, Kansas • HO 4-1520

Area warehouses in North Wichita, served by all lines into Wichita,
with free switching. Call Collect, Wire or Write for quotations.

Represented by Affiliated Warehouse Companies—
Agent for Howard Yon Lines, Inc. 512 East 21st St.

LOUISVILLE, KY, I

LOUISVILLE PUBLIC WAREHOUSE COMPANY

1450 South 10th St., Louisville 10, Ky.

II WAREHOUSES

397,000 Square Feet of Floor Space

Merchandise Storage and Distribution

MEMBER-A W.A.-American Chain-Distribution Service. Inc.

LAKE CHARLES, LA.

STORAGE - LOW COST

24 Hour Service—365 Days per Year. 40,000 Sq. Ft.—one floor—Watchman Service. City and State-wide Truck Line on Premises. Address Inquiries to—

A.F.&S. WAREHOUSE CORPORATION C/O AARON FERER AND SONS, INC.
ain Street St. Louis 6, Missouri

2028 N. Main Street

Phone-CE 1-9535

NEW ORLEANS, LA.

Accept

Established 1923



H. G. BAUER

1111 Barracks St. New Orleans 16, La.

Household Goods Storage Local & Long Distance Moving EXPORT CRATING & SHIPPING



UNITED VAN LINES, INC.

Moving With Care "Everywhere"

PACKING Phone Canal 1388 SHIPPING Teletype TWX 44 MODERN EQUIPMENT Cablegram BAUERSTOR

NEW ORLEANS, LA.

E. B. FONTAINE, JR., Pres. M. E. FONTAINE, Sec. R. A. CARUSO, Treas.

COMMERCIAL TERMINAL WAREHOUSE, INC.

INCORPORATED

Established 1910

A dependable agency for the storage and distribution of merchandise and manufactured products. Member of

1402 SOUTH PETERS ST. NEW ORLEANS, LOUISIANA



New Vest-Chies

NEW ORLEANS, LA.

26 YEARS YOUNG!



STORAGE CORPORATION

- √—2 SHIPSIDE WAREHOUSES
- √—STATE LICENSED—U. S. CUSTOMS BONDED SPACE
- √—COTTON COMPRESSION AND STORAGE
- √—COMPLETE CARTAGE SERVICE

WRITE: P. O. BOX 1495, NEW ORLEANS 5, LA.

PHONE: CANAL 7654

Represented Nationally by DISTRIBUTION SERVICE, INC.

NEW ORLEANS, LA.

Kramer's Transfer & Storage, Inc.

506 Tchoupitoulas St. New Orleans 9. La.

Merchandise and Household Goods Storage Private Sidings-Pool Car Distribution **Branch Office Facilities** Long Distance Hauling

Agents for American Red Ball Transit Co., Inc. Represented by D. H. Overmyer Warehouse Sales Co., Toledo, Ohio NEW ORLEANS, LA. T

TELEPHONE_CANAL 1661

HAYES DRAYAGE & STORAGE, INC.

833 So. Front Street - New Orleans, La.

Public bonded warehousemen — drayage (pick-up and delivery) — Labeling and distributing — im-porters and exporters — pool car distributors cotton warehousing, compressing and weighing.





SAFE Four distinct fire-risk sections Completely fireproof Steel and Masonry Construction
Watchman Patrol—Well-ventilated Automatic Sprinkler Supervisory Service

Fire rate 10.90c per hundred per year

CONVENIENT Out of the congested

3 blocks from Mississippi River Docks Within Switching limits Four dray-receiving platforms Switch track service at 3 loading doors



minimum handling Lift Truck Palletized Storage Operations completely mechanizedno hand labor



NEW ORLEANS, LA. New Orleans Merchandise Warehousemen's Ass'n

MALONEY TRUCKING & STORAGE, Inc. 133 NORTH FRONT ST., NEW ORLEANS 1

An Able servant to the PORT OF NEW ORLEANS

Complete warehousing facilities—Distribution—Weighing—Forwarding—Furmigating—Storage—Cartage—Field Warehousing—Office Space—Display Rooms—Sprinklered Risk.



NEW ORLEANS, LA. [

L. A. Kloor-E, J. Kraft, Owners

STANDARD WAREHOUSE COMPANY

- New Orleans B. La. 100 Poydras St.

MERCHANDISE STORAGE-POOL CAR DISTRIBUTION Located in the Heart of the Wholesale District • Conve-nient to Rail & Truck Depots • Private Switch Tracks T & NO-SP RR • Reciprocal Switching

COMPLETE WAREHOUSING SERVICE

SHREVEPORT, LA. T

Herrin Transfer and Warehouse Co., Inc.

1305 MARSHALL ST., SHREVEPORT, LA., P. O. BOX 1606 COMPLETE DISTRIBUTION SERVICE

Member

American Warehousemen's Association Southwestern Warehouse & Transfermen's Association



BANGOR MAINE T

McLAUGHLIN WAREHOUSE CO.

Incorporated 1918

General Storage and Distributing

Rail and Water Connection-Private Siding Member of A.C.W.-A.W.A.-N.F.W.A.

BALTIMORE, MD. IT

C. M. Wrightson, Mgr. & Treas.

CAMDEN WAREHOUSES

Camden Station, Baltimore 1
Operating Terminal Warehouse on Tracks The Baltimore & Ohio Railroad Co. A. D. T. Private Watchman, Sprinkler
Storage—Distribution—Forwarding
Tobacco Inspection and Export—Low Insurance
Consign Via Baltimore & Ohio Railroad

BALTIMORE, MD. | Complete Warehousing Services



Moving . Storage . Packaging Packing · Crating · Processing

6301 Pulaski Highway BRoadway 6-7900 Cable: DAVTRANSCO



BALTIMORE, MD. Member: M.RW.A. of A.-MD.F.W.A.-MD.M.T.A.-H.H.C.C.-A.T.A.

J. NORMAN GEIPE VAN LINES, INC.

524-536 W. Lafayette Ave., Baltimore 17, Md.

See our advertisement on page 268-1957 Directory Issue

BOSTON, MASS, T

Warehousing and Motor Freight Distribution

ATLANTIC STORES can expedite the delivery of your merchandise through its efficient warehousing methods and motor freight line terminal. Every type of modern mechanized handling equipment aids serving you economically. Private Siding. Free Switching.

ATLANTIC STORES, INC.

23-27 Stillings St., Boston 10, Mass.

BOSTON, MASS.

CHARLES RIVER STORES 131 Beverly Street, Boston 14, Mass.

Owned and Operated by

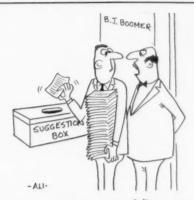
MERCHANTS WAREHOUSE COMPANY



Facilities — 230,000 square feet. Private alding Boston & Maine Rallroad. Trucks served from private area. General Merchandies storage. U. S. Customs Bonded Space. Located on Boston's new Arterial Highway.



Member AWA-MWA Represented by Allied Distribution Inc.



"YOU GOT A BEEF ?

BOSTON, MASS.

Hoosae Storage & Warehouse Company Lechmere Square, East Cambridge 41, Boston

FREE AND BONDED STORAGE
A.D.T. Automatic Fire Alarm
Direct Track Connection B. & M. R. R.
Lechmere Warehouse, East Cambridge, Mass.
Hoosac Stores, Hoosac Docks, Charlestown, Mar
Warren Bridge Warehouse, Charlestown, Mass.

WIGGIN IS

Unexcelled facilities for all storage needs



Wiggin terminals gives the benefit of many years ex-perience. Excellent labor relations. Safe, modern handling equipment and trained personnel speeds work along.

WAREHOUSES - 500,000 sq. ft. fire resistant. Pier connection — deep water berths — railroad sidings.

POOL CAR DISTRIBU-TION — 30 door RR siding — 30 door trucking area. Offices, display rooms, sales meeting rooms.



LUMBER TERMINALS—100 acres large sheds—deep water berths



Write or phone for a complete illustrated brochure showing how WIGGIN can serve you.

Represented by American Chain of Warehouses, Inc., & Distribution Service, Inc.

WIGGIN TERMINALS, INC.

50 Terminal Street, Boston 29. Massachusetts

Telephone CHarlestown 2-0880

SPRINGFIELD, MASS, T

General Cold Storage

Pioneer Valley Refrigerated Warehouse, Inc.

P. O. Box 155

Brightwood Station

Whee.: Steel & concrete, automatic fire & burgiar alarms—ADT. TSArea 1,000,000 sq. ft. Fl t.d 530 lbs. Cl Ht 8-10 ft. Elev cap 6,000 lbs. Priv alding 50-are cap ca. & consign shipments via B&M; sta. Brightwood; free switching. 100%, pallettzed. Temp. range—10° to 40°. Humidity control. 15-tk. dock. Specialize in frozen feeds. Open yard stg. Br. Office facilities. Loans on stored commodities. Printed tariff. Member of the A. W. A. (Cold Storage Div.)

SPRINGFIELD, MASS.



J. J. SULLIVAN THE MOVER, INC.

385 LIBERTY ST.

SPRINGFIELD 1

Merchandise and Household Goods Private Siding—Pool Car Distribution Heavy Hauling & Trucking—Furniture Packing & Crating—Local & Long Distance Moving—Rigging & Truck Crane Service

WORCESTER, MASS. [

Phone: PLeasant 3-6211-3-2611

LYON STORAGE COMPANY

Pitt & Kansas Sts., Worcester, Mass. SPECIALIZING IN

POOL CAR DISTRIBUTION

Worcester's Largest
General Merchandise Warehouse • 6 Sprinklered Buildings • 15 Car Private Siding • NY NH & H RR Bonded—Reciprocal Switching—ADT

DETROIT, MICH.



CENTRAL DETROIT WAREHOUSE

Located in the heart of the wholesale and jobbing district, within a half-mile of all freight terminals. Modern buildings, lowest insurance rate in city.

WAREHOUSE & TERMINALS CORPORATION Wyoming and Brandt Avenues

Modern concrete buildings, fully sprinklered, serving the west side of Detroit and the city of Dearborn. Specializing in heavy and light package merchandise and liquid commodities in bulk. Connected directly with every railroad entering the city.

Central Detroit Warehouse Co.

Fort and Tenth Streets, Detroit 16, Mich.



Detroit's ONLY Waterfront Terminal Offers You EVERY Facility . . .

A quarter-mile-long marine dock . . A quarter-mile-long marine dock . . . 44 delivery doors under cover . . . our own switching facilities . . . direct connections with Wabash, Pennsylvania and C. & O. Railroads . . reciprocal switch to all other lines . . . all storage in transit privileges . . 10-story reinforced concrete warehouse with 5,000,000 cubic feet general storage, 2,500,000 cubic feet cold storage . . completely sprinklered . . fully equipped for inside and outside loading . . inside track 25 car capacity . . tenant and office space also available.

Detroit Harbor Terminals, Inc.

4461 West Jefferson TA 5-3200 Detroit 9, Michigan

DETROIT, MICH.

R

IF. D

F.

F

1

C

I

E

N

T

R

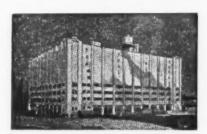
V

1 C Telephone: TR 4-0100

FREVENT HEAVY CONGESTION PROVIDES MORE EFFICIENT HANDLING

STORAGE CARTAGE POOL CAR DISTRIBUTION

Every modern warehousing facility is available. Desirable office space. car icing. Financing. Dry and refrigerated storage. In-transit privileges. Minimum insurance. Blast quick freezing rooms. Modern palletized equipment. Free reciprocal switchingall railroads. Continent wide connections.



GRAND TRUNK WAREHOUSE

COLD STORAGE COMPANY

W. J. LAMPING, Exec. V. P. & Gen. Mgr. 1921 E. FERRY AVE., DETROIT 11, MICHIGAN G. T. Rwy. Siding WAInut I-9380

DETROIT, MICH. \

LAKESHORE WAREHOUSE, INC.

Merchandise Storage—Pool Car Distribution Centrally located for all wholesale groceries Grand Trunk R.R. 6 Car siding

700 East Atwater

Detroit 26, Michigan



DETROIT, MICH.



In Detroit It's JEFFERSON For Complete
Warehousing and Distribution

Private Siding, Reciprocal Switching, Local Delivery via Our Own Trucks Reshipment to any Point Pool Car Distribution

200,000 sq ft of floor space. Modern building, completely sprinklered and fully protected by A.D.T. Excellent location. Mechanized for fast handling. Prompt reply to all inquiries.

JEFFERSON TERMINAL WAREHOUSE

1900 E. Jefferson Ave. Lo 7-4706 Detroit 7, Mich.

MEMBER OF DISTRIBUTION SERVICE, INC.

in KALAMAZOO it's . . . RANSLER

Commercial and Cold Storage

WAREHOUSE

Private Sidings Pa. R.R. and N. Y. Central

Teletype #KZ48

RANSLER

Storage and Van Service 703 West North St. — P.O. Box 126 KALAMAZOO. MICHIGAN

LANSING, MICH.

Phone Ivanhoe 9-6541-6542

ACME MOVERS & STORAGE

Incorporated

720 E. Shiawassee St. • I

Lansing, Michigan

Merchandise and Household Goods Storage

Three warehouses to serve you — 720 E. Shiawassee St. (brick) —Sprinklered—TSArea 60,000 sq. ft.—Private siding N.Y.C.—5 car capacity. 518 N. Grand St. (brick)—TSArea 20,000 sq. ft.—Private Siding N.Y.C. and C&O—Reciprocal switching—Open yard storage.

NATIONWIDE MOVERS
POOL CAR DISTRIBUTORS

Member: National Furniture Warehousemen's Assn.
Michigan Warehousemen's Assn.
Agent: Allied Van Lines

SAGINAW, MICH. T

SINCE 1912



OUTSTANDING WAREHOUSE SERVICE



CENTRAL WAREHOUSE CO

1825 Rust Avenue

SAGINAW. MICHIGAN

MINNEAPOLIS. MINN.



OUTSTANDING WAREHOUSE SERVICE



MINNEAPOLIS TERMINAL WAREHOUSE CO.
618 North Washington Ave., Minneapolis 1, Minn.

MINNEAPOLIS, MINN, T

Fetablished 1883

SECURITY WAREHOUSE COMPANY

GENERAL OFFICE: 334 NORTH FIRST ST.
MINNEAPOLIS 1, MINNESOTA
PHONE FEDERAL 3-1281

Merchandise Storage

Merchandise Storage
Pool Car Distribution, Local Trucking
Industrial Trackage Space

ST. PAUL, MINN.

A COMPLETE WAREHOUSING SERVICE

Merchandise Storage—Cold Storage
Pool Car Distribution—Industrial Facilities

Situated in the Midway, the center of the Twin City Metropolitan area, the logical warehouse from which the Twin Cities and the Great Northwest can be served from one stock, with utmost speed and economy.

CENTRAL WAREHOUSE COMPANY

739 Pillsbury Avenue

St. Paul 4, Minnesota

Represented by DISTRIBUTION SERVICE, INC.
251 E. Grand Sr.
CHICAGO 11 NEW YORK (1TY 7 SJ.
ms: SUperior 7-7180 Phone: Pho

605 Third St. SAN FRANCISCO 7 Phone: Suttor 1-3461



ST. PAUL, MINN.

MIDWAY TERMINAL WAREHOUSE CO. 2295 University Avenue, St. Paul 14, Minn.

> OUTSTANDING WAREHOUSE





SERVICE

ST. PAUL TERMINAL WAREHOUSE CO.

425 E. 8th St., St. Paul I, Minn.

JOPLIN, MO.

Sunflower Transfer & Storage Co. 1027-41 Virginia Ave. Joplin, Mo.



Distribution and storage of merchandise. Fireproof Warehouses—Motor van servce. On railroad siding—Lowest Insurance rates.

ance rates.
PACKING—STORAGE—SHIPPING
AGENT FOR NATIONAL VAN LINES



KANSAS CITY, MO. T

CHARLES C. DANIEL. Jr., Pres. & Treas.

MERCHANDISE WAREHOUSING and DISTRIBITING BRANCH HOUSE FOR FACTORIES POOL CAR DISTRIBUTION



77th YEAR "The Symbol of Service

CENTRAL STORAGE COMPANY has been serving distributors of merchandise (since 1880) longer than any other public merchandise warehouse in Missouri. There is no real substitute for experience. Our methods are standing the test of time and practical usage. New methods and equipment are being employed and still newer ones will be adopted as their use becomes practical in better serving our customers.

Tel.: VICTOR 2-3268

CENTRAL STORAGE COMPANY

1422 ST. LOUIS AVENUE (West 10th St.) KANSAS CITY 1. MISSOURI



warehousing/distributing facilities in the booming Kansas City marketing area!









Prokers Bldg.

wing Bldg 45-47 S. Ewing St. 1405 St. Louis Ave.

Security Bldg.

erminal Bldg.

4 warehouses offering these A-plus advantages:

Modern Facilities Responsible Management Spacious Switch Tracks Ample Truck Loading Doors Fleet of Motor Trucks

Cooler Rooms Storage in Transit Office Space Display Rooms

Crooks Terminal Warehouses, Inc.

1104 UNION AVE., KANSAS CITY 1

Chicago 7-433 W. Harrison St.

New York 17-51 E. 42nd St.

Associated with Overland Terminal Warehouse Co., 1807 E. Olympic Blvd.
Los Angeles 21

Member of the American Warehousemen's Association OFFERING COMPLETE BRANCH HOUSE FACILITIES:
Receiving/Storing/Weighing/Marking/Reconditioning/Car Distribution/
Freight Prepayments/Shipping/C.O.D./Sight Drafts/Inventories KANSAS CITY, MO.

TRY-

EVANS WAREHOUSE SERVICE

1325-1327 St. Louis Avenue . Phone Be-Itimere 4135 GENERAL MERCHANDISE WAREHOUSING POOL CAR DISTRIBUTION

We operate our own fleet of motor trucks, Loading docks; E. R. siding Missouri Pacific, Inquiries answered pramptly.

in KANSAS CITY it's

G-K

WAREHOUSES, INC.

Kansas Ave. & Railroad St.

Represented by AFFILIATED WAREHOUSE COMPANIES

Chicago 20 E. Jackson Blvd. WE 9-0794

New York 36 W. 44th Street MU 2-8927

KANSAS CITY, MO. Teletype: KC-248

Telephone: Victor 2-0707

MERCHANDISE WAREHOUSING

We own 400,000 sq. ft. of space Sprinklered Building Central Alarm System **Pool Car Distribution Branch Office Facilities**

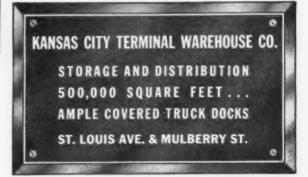
OWN AND OPERATE OUR OWN CARTAGE COMPANY

JACOBS WAREHOUSE CO., INC.

Executive Offices: 1328-30 W. 12th St.

Kansas City 1, Mo.

Kansas City, Mo. Member of A. W. I.



KANSAS CITY, MO.

COMPLETE WAREHOUSE FACILITIES



for the proper Storage and Distribution of your Merchandise in the Kansas City trade Telephone: Victor 2-8292

POOL CAR DISTRIBUTION We invite your Inquiries



MIDWEST TERMINAL WAREHOUSE CO.

2020-30 Walnut Street, Kansas City 8, Mo.

Owned and Operated by the ST. LOUIS TERMINAL WAREHOUSE CO., ST. LOUIS, MO.

ST. LOUIS. MO. T

DISTRIBUTORS WAREHOUSE

INCORPORATED

GENERAL MERCHANDISE STORAGE Pool Car Distribution
Legal Liability Insurance
Low Insurance Rates
ADT Protestion — Telephone Main 1-8371



ST. LOUIS. MO. 1

Telephone: CHESTNUT 1-8394

1025 Spruce St., St. Louis 2, Mo.

GENERAL MERCHANDISE STORAGE



Sidings Terminal R. R. — Reciprocal Switching — Bonded — Sprinklered — 265,000 Square Feet Centrally Located in Wholesale and Jobbing District-Low Insurance Rate.

Represented By Affiliated WADEHOUSE COMPANIES

105 W. Medison St. 36 W. 44th Street Chicago 2 New York 36 ST 2-5180 MU 2-8927



ST. LOUIS, MO. [

CEntral 1-9535

Madison Street Terminal Warehouse Corp. 2000-2028 North Main Street

- Complete Warehouse Service Single and Multiple Floor Facilities F. M. Insured
- 600,000 Legal Liability
 Member—A.W.A.
 Burglar & Sprinkler protection

"Compare Service—Cost and Facilities"

ST. LOUIS. MO. [

Merchandise Storage and Distribution.

RUTGER STREET WAREHOUSE, INC.

MAIN & RUTGER STS., ST. LOUIS 4 MUrray Hill 9-7645

A.D.T. Burglar & Sprinkler Alarms.
200,000 Sq. Feet of Space
BONDED Low Insurance RAndolph 6-4457

Track Connections with All Rail and River Lines

Offices:



ST. LOUIS. MO.



"Serving industry for more than 30 years"

OVER 1,000,000 Sq. Ft. of WAREHOUSE Space

Located right in the midst of business

Plus FAST and EFFICIENT DISTRIBUTION in the ST. LOUIS AREA

Complete Facilities



Pool car distribution Reforwarding storage in transit A.D.T. Alarms and sprinkler systems Traffic and legal depts. Bonded employees

ST. LOUIS TERMINAL WAREHOUSE CO.

eral Offices + 826 Clark Ave. • St. Louis 2, Mo. • MAin 1-4927

CHICAGO OFFICE 53 West Jackson Boulevard (4) HArrison 7-3688

NEW YORK OFFICE 250 Park Avenue (17) Plaza 3-1235

AMERICAN WAREHOUSEMEN'S ASSOCIATION

ST. LOUIS, MO.

Established 1912



Warehouse &

Cold Storage Co.

SATISFIED
NATIONAL DISTRIBUTORS
FROM COAST TO COAST
PERFECT RAIL-TRUCK
AND WATER CONNECTIONS
LOCATED IN THE HEART OF THE
WHOLESALE SHOPPING DISTRICT

CANDY STORAGE

200 Dickson St.

The only Cold Storage in the U.S. equipped with patented auto-matic, temperature and humidity controls.

> Insurance rates of 16.2 per \$100

Members of A.W.A.-Mo.W.A. - St.L.M.W.A.

Sprinkler & Burglary Protection

ST. LOUIS, MO. [

PROSPECT 2-2675

WAREHOUSING CORPORATION

of Missouri, Inc.

3937 PARK AVENUE

ST. LOUIS 10, MO.

3937 PARK AVENUE ST. LOUIS 10, MO.

General Merchandise Cold Storage

Ideal for Candy—Dried Fruit and other items requiring cool room Storage. Pool

Car Distributing and Forwarding Service. A D T Burglar and Sprinkler Alarms.

Bonded. Served by Missouri Pacific & Frisco RR. Available fleet of Modern

Trucks, ample car loading sidings. Large Covered Truck Dock.

SPRINGFIELD MO.

Agent: ALLIED VAN LINES, Inc.

GENERAL WAREHOUSE CORP.

401 N. National Ave., Springfield, Mo. Phone 4-1855-TWX-5015

MERCHANDISE AND HOUSEHOLD GOODS STORAGE
POOL CAR DISTRIBUTION

Fe Specialise in Transit Storage

Member AFA, NFFA, MOFA, ACF

Chicago Office

S3 W. Jackson (4) HArrison 7-3688

250 Park Ave. (17) YUkon 6-7722

LINCOLN NEBR

MERCHANDISE STORAGE AND DISTRIBUTION

POOL CAR DISTRIBUTION

Excellent Storage AT TRANSIT POINT

RIGGING. HEAVY HAULING. MOVING, PACKING, STORING

Fleet of 40 Trucks

Represented by Allied Distribution Agent-Aero Mayflower Transit Co. Member—American Warehouseman's Ass'n



301 North 8th St LINCOLN, NEBR.

GRAND ISLAND, NEBR.

OMAHA, NEBR.

FORD

STORAGE & MOVING COMPANY

STORAGE & MOVING COMPANY Omaha 2, Nebraska Omaha's most modern, centrally located warehouse. Fireproof construction—Fully sprinklered—Low insurance. Sidings on 1.C. R.R. and U.P. R.R. U. S. Customs Bond. General Merchandise—Cooler Storage—Aleasshold Goods Storage, Also operate modern facilities in Council Bluffs, lows. Our own fleet of trucks for quick deliveries. Member of N. F. W. A. and A. W. A.

OMAHA, NEBR. 1

GORDON STORAGE WAREHOUSES, INC.

"Satisfactory Service Since 1887" Agt. Allied Van Lines, Inc.

Modern sprinklered whse, on trackage Mdse. Stge. & complete Dist, service Member of A.W.A. & N.F.W.A.

1201 Jones St.

JA: 3032

MANCHESTER, N H. [

New Hampshire's Largest Warehouse (Privately and State Bonded)

McLANE & TAYLOR CORP.

Serving a fast-growing, year 'round marketing area. General Merchandise - STORAGE - Household Goods

Freezer and Cooler Space.
Pool Car Distribution—Storage in Transit.
Private Siding—Boston & Maine Railroad. Offices: 624 Willow St.

Tel. 4-4521

Smooth Terminal Operation plus

- Strategic location
- Completely modern marine terminal
- Deep-water dockage—plenty of elbow room
- Wide wharf aprons, truck and rail platforms
- · Direct connections with all trunk line milroads entering the area

Send today for new folder showing our facilities.

CAMDEN MARINE TERMINALS

CAMDEN, N.J. - WOODLAWN 4-5028

Operated by South Jersey Port Commission D. C. Nevins, Gen. Mgr.

CAMDEN, N. J.

EAVENSON & LEVERING

DIVISION OF MACK WAREHOUSE CORPORATION

3rd & Jackson Streets

Camden, New Jersey DISTRIBUTION

WAREHOUSING

- * 400,000 Sq Ft of ideal storage space
- * Storage-in-transit
- * Pool car distribution
- **Export Packaging**
- PRSL Siding with 15 car capacity Ample truck docks
- Experienced, well-equipped personnel

Camden phone: EM 5-6200 Phila. phone: MA 7-2793

ELIZABETH, N. J.

Feeablished 1084

Lehigh Warehouse & Transportation Co.

Incorporated
Tel.—Market 3-1830 PHO: Newark Ave.

FACILITIES—S00,000 sq. ft. Reinf. concrete & Steel, Fir. 1d. 250 lbs. Firepreef Auto. Fire & Burg.—ADT. Ins. \$167. Siding PRR. 30 cars. Shelt. plat. 20 trks. SERVICE FEATURES—Pool car dist. Co. oper. cartage serv. \$2 trks. 07. & Stge. space for lease. Spec. In hding. ige. machinery & steel in lifts up to 4/2 tons. I publ. Elv.; Fr. Plat. Elev.; 5 Pbl. Trg. Mach.; 4 Elev. Plat. Trk.: 40 Plat. the Plat. Elv.; 5 Pbl. Trg. Mach.; 4 Elev. Plat. MEMBER—A.W.A.; N.J. Mtr. Trk. Assoc.; Whse. Assoc. of N. Y.

JERSEY CITY, N. J.

J. LEO COOKE WAREHOUSE CORP.

140 BAY ST., JERSEY CITY 2, N. J.

Telephones: (NY) WHitehall 3-5090 (NJ) OLdfield 3-5080 TWX: JC-112 J. Leo Cooke, President Frank E. Kearney, Vice President—Sales
Established 1949. Investment over \$200,000

Established 1949. Investment over \$200.000

FACILITIES—300.000 sq. f. reinf. conc. and steel, Low ins, rates, watchman serv. Fl. Ld. 250 lbs. Siding Pennsylvania RR. Also Eric RR., 12th & Provest Sts., Jersey City. Local and over-the-read truck service. Shelt, plat. Spec. in food and products requiring protection from dampness, dirt, heat or cold. Mod. mat. handling.

JERSEY CITY, N. J. 1

Est. 1940

Lackawanna Warehouse Company, Inc.

Tel.—(N.J.) Journal Sq. 2-3360, (N.Y.) Rector 2-9345
FACILITIES—1,072,883 sq. ft. Reinf. concrete & Steel. Firsproof. Fire & burg.—ADT Ins. \$0.6. Siding D.L.&W. RR. 52 cars. Shelt. Plat., 54 tracks. Ceiling hgt. 8½ ft. Elev. cap. 12,000 lbs.
SERVICE FEATURES—Fool car dist. Stge. & off. space for lease. Co. oper. cartage serv. 52 trks. \$17 arrangements. 24 ft. plat. elev; etc. MEMBER: A.W.A.; N. J. Motor Truck Assoc.; Whse. Assoc. Fort of N.Y.A.

NEWARK, N. J.

"TOPS IN NEW JERSEY"

Federal Storage Warehouses

155 Washington Street Newark 2, New Jersey Mitchell 3-2222

MITChell 3-ZZZZ

FACILITIES—700,000 square feet, reinforced steel and comerate bidgs. Fully sprinklered freproef, heated, ADT suspervised, Penn. R.R. slding, low insurance rates. Centrally learned in Newark, N. J.
SERVICE FEATURES—General merchandise stored, distributed. Offices and showrees pace. Pool card distribution, large elevators, labeling and shipping, leade platforms. Modern materials handling and palletized. MEMBER—A.T.A.; N.I. Motor Truck Assoc. N.A.V.L.

NEWARK, N. J. [

F-4 1010

ehigh Warehouse & Transportation Co.

Manager

Bit. Cen.; Fagr. Type Elev.; Frt. Plat. Elev.; 5 Phil. Trg. Mach.; 4 Elev. Plat. — ADT. Ins. 5,064 Fir. Id. 250 lbs. Siding Lehigh Valley, 15 cars. Reelp. switch with PRR. Shelt. plat. 23 trks.

BERVICE FEATURES—Co. oper. certage. 52 trks. Seco. in food, liquora, size. apples. 2 grav. rol. cen.; 8 frt. elev.; 120 plat. it.; 14 hand its.

MEMBER—A. W.A.; N.J. Moter Trk. Assec.; Whise. Assoc. N. Y.

NEWARK

Every desired warehousing service.

OVERMYER WAREHOUSE BIDG 228 PORT NEWARK

Phone: MI 2-6272



TRENTON, N. J. T

In heart of Delaware Valley, U.S.A.

DELAWARE VALLEY WAREHOUSE CO.

EAST STATE ST. & ROBERTS AVE., TRENTON, N. J.

230,000 sq. ft. of modern single-level industrial storage space. A.D.T. sprinkler & burglar protection. Fully mechanized & palletized. On P.R.R. main line. N.Y. to Phila. 3 sidings (25 cars); 20 truck placements. Handy to N.J. & Pa. Turnpikes, other major highways. Tel. Juniper 7-5265.



AMSTERDAM, N. Y.

Victor 3-2110

SLEZAK BROS. WAREHOUSE, INC.

146 Church St. Amsterdam, N. Y. 150,000 sq. ft. of dry storage space, sprinklered

throughout. Railroad and truck loading . 1,000,000 gallons of liquid storage space.

AMSTERDAM, N. Y.

TELEPHONE-VICTOR 2-4670

THRUWAY WAREHOUSE CORPORATION AMSTERDAM, NEW YORK 50 PARK STREET

322,000 sq. ft., Concrete and Steel Construction-Fully Sprinklered — Insurance Rate 10¢ — Priv. Siding NYC R.R., 20 Car Capacity—Storage In-Transit Strategically located one mile East of New York State Thraway at Exit 27

BROOKLYN, N. Y. CENTRALLY LOCATED

Member of A.W.A.

EMPIRE STATE WAREHOUSES COMPANY 390-98 NOSTRAND AVENUE . BROOKLYN 16, N. Y. FIREPROOF WAREHOUSES



STORAGE OF GENERAL MERCHANDISE
10 GIANT FLOORS
MODERN LOADING AND UNLOADING FACILITIES
PRIVATE VAULTS FOR LIQUORS
COOLER AND TEMPERATURE CONTROL SPACE AVAILABLE

BUFFALO, N.Y.

FOR PEACE OF MIND WHEN MOVING OR STORING



SO YEARS

AMERICA 3 WAREHOUSES BUFFALO, N. Y.



BUFFALO, N. Y.

Telephone: Victoria 2411 **BUFFALO MERCHANDISE**

WAREHOUSES, INC. STORAGE AND DISTRIBUTION NYC Siding. Reciprocal switching

Members: American Chain of Warehouses, isc. New York and Chicage American Warehousemen's Assn., Chicage

General Offices: 261 GREAT ARROW AVE., Buffalo 7

BUFFALO, N. Y.

Ri. 1520-1521

Kencroft Warehouse

Div. of Kencroft Malleable Co., Inc.

373 Hertel Ave.

Buffalo 7. N. Y.

100,000 Square Feet All Main Floor, No Load Limit, N.Y.C. 12 Car Siding, Ample Truck Docks, Main Buildings Fully Sprinklered, A.D.T. Fire and Burglar Protection, 15 to 20 ft. Sprinkiered, A.D.1. Fire and Burgiar Protection, 15 to 20 rd. Ceiling, Fully Fenced Six Acres Yard Space, Low Insurance Rates, Mechanized Handling, Careful and Sincere Supervision. Can Accommodate Small or Large Accounts.

New York Representative

Arthur Link, 17 State St., New York 4, N. Y. Telephone Digby 4-0648

BUFFALO, N. Y.

Cataway to National Distribution

KEYSTONE WAREHOUSE CO. 541 SENECA STREET, BUFFALO 4, N. Y.

economical warehousing and shipping. Moderning and equipment. Storage-in-transit privileges; building and equipment. Storage-in-transit privileges; low insurance rates. Direct track-connection with Penna. R. R., and N. Y. Central and switching arrangements with all lines into Buffalo. Capacity 20 cars daily. Phone: MAdison 8860.



BUFFALO, N. Y.

DEPENDABLE SERVICE SINCE 1901

Knowlton Warehouse, Inc.

32 Mississippi Street, Buffalo 3, N. Y.

MERCHANDISE STORAGE AND DISTRIBUTION MODERN BUILDINGS - PRIVATE SIDING

BUFFALO, N. Y. Let us care for your needs in Buffalo

LARKIN WAREHOUSE INC.

189 VAN RENSSELAER ST., BUFFALO 10

General Merchandise Storage and Distribution Modern — Fireproof — Lowest Insur-ance Rate in Buffalo. On the Erie R.R. GOVERNMENT BONDED WAREHOUSE



BUFFALO, N. Y.

DERE



HAVE SOMETHING IN STORE for you . . . NIAGARA FRONTIER FOOD TERMINAL, BUFFALO

BUFFALO, N. Y.

Seneca Warehouse & Industrial Center, Inc. 701 Seneca St., Buffalo 10, N. Y.

Complete warehouse service, extensive industrial space. I,500,000 sq. ft.—areas from 1000 to 160,000 sq. ft. per floor. Pool car distribution, mechanized handling equipment, all utilities, NYC siding. Floor load, 250 lb. per sq. ft.

Represented by Affillated Warehouse Companies
105 W. Madison St., Chicago 2, 111.—36 W. 44th St., New York 38, N. Y.

BUFFALO, N. Y. T

WILSON WAREHOUSE

Gen. Offices: 290 Larkin St., Buffalo 10 General Merchandise Storage and Pool Car Distribution

Fireproof Buildings Low insurance rate

N.Y.C. Siding Branch office facilities



DEER PARK, L. I., N. Y.

90,000 Sq. Ft. - Sprinklered



Daily Distribution in Metropolitan N. Y., 8 Counties in N. J., and all Long Island. 7 Car R.R. Siding-40 Bay Truck Terminal.

PINTER WAREHOUSE, Inc.

Carll's Path, Deer Park, L. I., N. Y .- DEer Park 2-4121 Direct Wire From N. Y. C. HOllis 4-9798

DUNKIRK, N. Y. Subsidiary of The Keystone Warehouse Company, Buffale

TIDEWATER-CLEVELAND STORAGE CORP.

118-198 STEGELSKI AVENUE, DUNKIRK, N. Y.
On NYC main line between Buffalo and Cleveland.
One-story, high-ceiling, sprinklered brick and steel building. Covered NYC siding; 20-car capacity. Reciprocal switching with PRR, Nickel Plate, and Eric. Storage-in-transit privileges on a large variety of products. Phone: Dunkirk 7740.



HORSEHEADS, N. Y. T

Wet 1981

Lenigh Horseheads Warehouse Corp.

Horseheads Industrial Center, N. Y. Thomas R. Clark, Manager

FACILITIES—Whee.: one-story, fully sprinklored, 350,000 Mg. ft. Fl. id. unlend. Cl. Ht. id ft. insurance \$.329. Priv. siding 40-sar sap on. & consign shipments via PRR-LV-Eric-DL&W Tk dock-unlimited.

SERVICE FATURES—Assembling, peakaging, bottling, Sign. space for lease, Mats. Hdig.: Fork Lft. Tk. Paits. Socializing in food products, observical appliances, paper products, non-hazardous chemicals, etc. C of C of Horseheads.



WAREHOUSE COMPANIES

36 West 44th St., NEW YORK 36 MU 2-8927 • Robert J. Lamneck

NEW YORK

N.Y.

John Terreforte

Fastern Manager



NEW YORK, N. Y.

Phone AL KISTNER

MUrray Hill 9-7644-5 FOR

STORAGE-COAST TO COAST-SERVICE MERCHANDISE WAREHOUSES IN 75 CITIES

SSOCIATED WAREHOUSES, INC. VANDERBILT AVE. . NEW YORK 17, N. Y.

NEW YORK, N. Y.

Cable Address: BOWLINGVAN

BOWLING GREEN

STORAGE AND VAN COMPANY NEW YORK CITY

House to house moving round the World of Household Effects and Art Objects in Steel and Wood Lift Vans. Safety for Foreign Shipments.



NEW YORK, N. Y. MANUFACTURERS! WHOLESALERS!

WAtkins 4-0990 TRAFFIC MANAGERS!

Let CHELSEA Be Your NEW YORK STOCKROOM

NEW YORK, WESTCHESTER, LONG ISLAND and NEW JERSEY

WAREHOUSING . DISTRIBUTING . PACKING SHIPPING - TRUCKING - Local Agent ALLIED VAN LINES MAIN OFFICE 426-438 WEST 26th ST., NEW YORK

NEW YORK, N. Y.

Phone: Millergy Hill 7-4975-4-7

WAREHOUSE REPRESENTATION

If you believe in the old fashioned personal call, here is a shirt sleeved selling organization to project your story.

D'ALTON, JOHNSON & SEIFERT 202 E. 44th St., New York 17, N. Y.

NEW YORK, N. Y. T

Storage, Distribution and Freight Forwarding From an Ultra-Modern Free and Bonded Warehouse

IDEALLY LOCATED

IN THE VERY CENTER OF NEW YORK CITY

Adjacent to All Piers, Jobbing Centers and the Holland and Lincoln Tunnels

Unnual facilities and unlimited experience in forwarding and transportation. Motor truck service furnished when required, both local and long distance. Lehigh Valley R.R. siding — 12 car capacity — in the building. Prompt handling — domestic or foreign shipments.

MIDTOWN WAREHOUSE, INC.

Starrett Lehigh Bldg.

601 West 25th St., New York 1 Represented by Associated Warehouses, Inc.—New York City and Chicago

NEW YORK OVERMYER

WAREHOUSE SALES COMPANY Please contact EASTERN SALES OFFICE

Newark, N. J. Port St., Port of Newark Phone: Mitchell 2-6272 In NYC call: MUrrayhill 7-3728



NEW YORK, N. Y.



THE SEVEN

MOVING . STORAGE . EXPORT PACKING To and From Everywhere

447 West 49th St. . New York 19, N. Y. COlumbus 5-4600

NEW YORK, N. Y.

TRafalgar 3-3133

475 Amsterdam Ave., New York, N. Y. FIREPROOF STORAGE WAREHOUSES U. S. CUSTOMS BONDED & FREE Household & Commercial Storage ommercial—local and Long Distance Movers Export Packers—Pool Car Distribution Affiliated with North American Van Lines Member of NFWA—NYWA—NYWA—NYWA—N & WAGNY Commercial-

120

ROCHESTER. N. Y.

George M. Clancy Carting Co., Inc.

Storage Warehouse
Main St., East of Circle St., Rochester 7
General Merchandising Storage—Distribution
Pool Car Distributed—Reshipped
U. S. Custom Bonded—Storage—Drayage
Household Goods Moved—Storage Shipped
Direct R.R. Siding N. Y. Central in the Center of Rochester

SYRACUSE, N. Y.

200,000 SQUARE FEET

GREAT NORTHERN WAREHOUSES, INC.

Every Modern Warehousing Service for

Merchandise and Household Goods

2 Private Rail Sidings — 4 Buildings car, Motor Freight Service Ta All New York State Points mber: American Chain Of Warehouses -- MayWA

SYRACUSE, N. Y. I

DISTRIBUTION MOTOR FREIGHT LINES PRIVATE RAIL SIDINGS

ERIE BLYD. AT SO. WEST ST., SYRACUSE 1
COMPLETE MERCHANDISE AND HOUSEHOLD GOODS STORAGE
SERVICES

Represented by DISTRIBUTION SERVICE, INC.

Members A.W.A.—N.F.W.A.—A.V.I.—N.Y.S.W.A.

WHITE PLAINS, N. Y. I

J. H. EVANS & SONS, INC.

Office & Warehouse: 107-121 Brookfield St.

Household Goods Moving, Storage, Packing, Shipping. Prompt service for any point in Westchester County.

Member N.Y.F.W.A .- N.F.W.A



Established 1908

AMERICAN STORAGE & WAREHOUSE CO., INC. CHARLOTTE 1, N. C.

Office and Warehouse, 926 Tuckaseeges Road MERCHANDISE STORAGE ONLY. POOL CARS DISTRIBUTED MOTOR TRUCK SERVICE LOCAL AND DISTANCE PRIVATE BAILROAD SIDING, SPRINKLERED

CHARLOTTE, N. C. All buildings fully fireproof construction

UNION WAREHOUSE CO., INC. BONDED

634 South Cedar St.

MERCHANDISE STORAGE—POOL CAR DISTRIBUTION

Member of A.W.A.—Motor Service

CHICAGO & SELIED DIS

GREENSBORO, N. C. Telephone 30533

Western Union-Wux

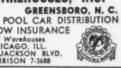
CENTRAL CAROLINA WAREHOUSES, INC.

2000 E. BESSEMER AVE. MERCHANDISE STORAGE 50 CAR PRIVATE SIDING

Represented by American Chain of Warehouses
NEW YORK, N. Y.
250 PARK AVE.
7 Ukon 6-7722

HARRISON 7-3488

LOW INSURANCE BLVD.



HIGH POINT, N. C. [

GRANVILLE BONDED WAREHOUSE

Merchandise Warehousing — Pool Car Distribution

FULLY SPRINKLERED - LOW INSURANCE SOUTHERN RAILWAY SIDINGS

RALEIGH, N. C. T

CAROLINA STORAGE & DISTRIBUTING COMPANY MERCHANDISE STORAGE POOL CAR DISTRIBUTION

Private Sidina

Trucking Service

Members A. W. A. American Chain of Warehouses

RALEIGH. N. C. I





SPRINKLERED . LOW INSURANCE RATES . PRIVATE SIDING OVER 2,000,000 CU. FT. SPACE

RALEIGH BONDED WAREHOUSE, INC.
Wake Forest Road Raleigh, North Carolin

FARGO, N. D.

Union Storage & Transfer Company
FARGO, N. DAK.

General Storage—Cold Storage—Household Goods
Established 1906 Fig. of this 36,500 ss., ft.,
devoted to cold storage. Three buildings bysinkler equipped. Lew Insurdevoted to cold storage. Three buildings bysinkler equipped. Lew Insurdevoted to cold storage. Three buildings bysinkler equipped. Lew Insurdevoted to cold storage. Three buildings bysinkler exclusive. The Storage Storage

IN AKRON IT'S THE

COTTER MERCHANDISE STORAGE COMPANY

133 East Center Street P. O. Box 808 Akron 9, Ohio Phone Franklin 6-3136

Warehouse facilities: Six buildings allow space for all types of storage. Our own trucks give prompt delivery. An experienced staff backed by 75 years experience.

· Rengerented by

CHICAGO 4
294 S. MICHIGAN AVE. RELIED DISTRIBUTION INC. 11 WEST 41ND ST.
WAlbish 2-1587

CANTON, OHIO MEMBER

ASSOCIATION

CANTON STORAGE, Inc.

FOURTH AND CHERRY, N. E.

Pool cars distributed. Private sidings. Free switching on all roads. Separate fire-proof warehouses for household goods.

Member: A.C.W.—May.W.A.— A.W.A.—O.F.A.A.—O.W.A.



CINCINNATI

Every Modern Advantage

GENERAL MERCHANDISE, FREEZER STORAGE Quick Blast Freezing Mechanized Efficiency Under Cover Protection Strictly Firegroot U.S. Customs and ADT Protection General Liquor Low Insurance Rates Storage

Over 9,000,000 Cubic Feet 11 Car Switch in Building 65 Loading Docks Pool Car Distribution

The second of th Lone Distance Truck Terminals

CINCINNATI TERMINAL WAREHOUSES INC. LEASEHOLD, OFFICE, WAREHOUSE AND DISPLAY SPACE

49 Central Ave. - CINCINNATI 2, OHIO - PArkway 1-8070 MEMBER-AWA-DWA-NARW

CINCINNATI, OHIO I

"OUR ONLY PRODUCT IS SERVICE"

Synchromatic tabulating card inventory control system.

FRANK HAMILTON WAREHOUSES, INC. 2101 Ross Ave., Cincinnati 12, Ohio. Phone RE 1-8850

Modern one floor plan storage Private siding on B. & O. Railroad

Pool Car Distribution Storage in Transit Privileges.

Member Allied Distribution Inc. Mamber Ohio Warehousemen's Assa

CLEVELAND, OHIO

COMPLETE WAREHOUSING SERVICE

THE CONATY WAREHOUSE COMPANY



Merchandise Storage — Pool Car Distribution LOCAL DELIVERY

PRIVATE SIDING FRIE BAILBOAD 656 LEADER BLDG. CLEVELAND 14, OHIO
Represented by Affiliated Warehouse Companies, New York City & Chicago. III.

CLEVELAND, OHIO

Member of A.W.A .- O.W.A.

WATER, RAIL and TERMINA

TRUCK FACILITIES Cleveland's Unly Lakefront Public Warehouse with Direct Connecting R. R. Offices: FOOT OF E. 9th ST. tacilities. Cleveland 14 A D T Protection



NATIONAL COMMERCIAL WAREHOUSE

2719 Fast 75 St Cleveland 4. Ohio

Phone: HE 1-2342 TWY _ CV 889

75 St. Warehouse

75 St. Warehouse
Private siding, Nickel Plate R.R. • Heated • Sprinkler throughout • Lowest insurance rate • Central location • In-transit service • Pool car distribution • Truck delivery • Palletized merchandise handling • Office rental • Personal service for you and your customer • Teletype service.

Kinsman Rd. Warehouse
Household goods, store and office fixture, display storage • 48-state and overseas moving via van, air and water • Agents in all principal cities • Teletype service.

AFFILIATE

NEW YORK STAR MOVING & STORAGE CO.

13822 Kinsman Rd.

Cleveland, Ohio WA 1-0468

NATIONAL VAN LINES : dillib

CLEVELAND, OHIO

NATIONAL TERMINALS CORPORATION

1200 West Ninth Street, Cleveland 13, Ohio

Four Modern Warehouses in Downtown Section General Storage, Cold Storage. Office Space and Stevedoring at our waterfront docks.

CLEVELAND, OHIO

HAS THE FACILITIES TO MEET ALL OF YOUR NEEDS

Downtown location; Modern and fireproof; Low insur-ance rates; Enclosed docks and siding on Big 4 Railroad; Daily delivery service; Office and display space; Telephone accom-modations; U. S. CUSTOM BONDED.

General Offices

CLEVELAND

Best of Service

250,000 sq. ft. PRR. Every desired warehousing service.

6900 CENTRAL

OVERMYER WAREHOUSE Phone: HE 1-6560



CLEVELAND, OHIO

Complete Modern Facilities For Efficient And Economical Warehousing And Distribution

3540 Croton Ave. • Cleveland 15, Ohio • HE 1-4900

- . HIVE CENTRALLY LOCATED
- FIREPROOF WAREHOUSES
- LOW INSURANCE BATES
- . MODERN MATERIALS HANDLING METHODS AND EQUIPMENT POOL CAR SERVICE

MEMBER DISTRIBUTION SERVICE, INC. NEW YORK OFFICE: 2 BROADWAY - BOwling Green 9-098/CHICAGO OFFICE: 251 EAST GRAND AVE. - SUperior 7-7120

CLEVELAND, OHIO

"Cleveland's Greatest Industrial Warehouse"

RESERVE TERMIN

Unlimited Industrial — Non-Perishable

- 8.487,000 cu. ft. dry. clean storage space.
 2 indoor sidings (N. Y. C., P. R. R.) for 14 cars.
 Paved, truck drive-through indoors (Next to sidings).
- It heavy-duty overhead cranes; elevator, lift trucks. * Complete traffic dep't service, receiving, storing, distribut-
- ing. * Scheduling rail, common or contract carriers. Transfers indoors

4393 Hamilton * Cleveland 14 * EN 1-3900

COLUMBUS, OHIO

COLUMBUS TERMINAL WAREHOUSE CO.

Modern warehouses and storage facilities. A.D.D.T. System. Private double track siding. Free switching from all railroads.
Chicago 4
224 S. Michigan Ave.
Wabash 2-3567 119 East Goodale St.



OWLAGO & BELLED

MEM 1/0 82 10

COLUMBUS, OHIO [

THE MERCHANDISE WAREHOUSE CO. 370 W. Broad St., Columbus 8



MERCHANDISE STORAGE and DISTRIBUTION

Private Siding NYC and Big Four 14 Car Capacity
Pool Car Distribution A.D.T. Service
Centrally Located Modern Facilities
Members A.C.W.—0.A.W.—A.W.A.

COLUMBUS, OHIO

The NEILSTON STORAGE CO.

260 East Naghten Street, Columbus 15

Modern warehouse for merchandisc—Low insurance — Central Location in jobbing district — Private railroad siding—Pool cars distributed.

Member of O.A.W.



For more product information use the

READERS' SERVICE CARD

facing Page 69 to check your selections



135,000 square feet of sprinklered space A. D. T. protected • 10 car private rail sidings, free switching to all railroads
• Ample truck docks • City Deliveries • Transit storage • Modern mechanized equipment • Every shipment pl graphed • Prompt reports • Leased space available.

Phone EMerson 1696

Affiliated WAREHOUSE COMPANIES St. 36 W. 44th Street New York 36 MU 2-8927

D DAYTON WAREHO

101 Bainbridge St.

Dayton, Ohio

LEWIS AND MICHAELING

Merchandise Storage and

EMIRSON 1681

100 Gale Street . Dayton 8, Ohio Teletype DY-132



- Reciprocal switching Penna and Erie RR's Modern handling
- Local cartage service Pool car distribution

Storoge in transit

UNION STORAGE DAYTON, OHIO 10 S. CONOVER ST. . EMERSON 1871

PROTECTION + PENNSYLVANIA N. V. C. & & O. BALLEDAD SIDINGS + RECIE

350 000 SQUARE FEET OF STORAGE SPACE . 40 CARLOAD SPOTTINGS . 35 TRUCK CAPACITY LOAD

ASSOCIATED WITH C & A TERMINAL CO., 3636 S. CALIFORNIA AVE., CHICAGO 32, ILL

PHING SPACE . MECHANIZED EQUIPMENT . TRANSIT STORAGE . RAPID HANDING OF ALL TYPES OF ME



TOLEDO, OHIO

LARGEST MODERN PUBLIC GENERAL MERCHANDISE AND COLD STORAGE WAREHOUSE IN TOLEDO AND NORTHWESTERN OHIO. CAPACITY 4,500,000 CU. FT. FOUR PRIVATE SIDINGS—NYC AND BBO RR's. COMPLETE WAREHOUSING SERVICE.

GREAT 321-359 MORRIS ST

LAKES TERMINAL CO TERMINAL TOLEDO 4. OHIO

TOLEDO, OHIO

Member of AWA

MERCHANTS AND MANUFACTURERS WAREHOUSE CO.

Office and Main Warehouse: 15-29 So. Ontario St., Toledo 3



Main Warenouse: 13-29-30. Onlario 31., Totedo 5
CENTER OF JOBBING DISTRICT
Sprinklered Buildings—100,000 square feet Dry Storage—
70,000 cubic feet Cool Storage—Private Siding—Nickel Plate
Road. Free Switching. Merchandise Storage—Pool Car Distribution—Negotiable Receipts—Transit Storage Privileges—
Low Insurance Rate—City Delivery System.

TOLEDO Best of Service

475,000 sq. ft. NYC, NKP, PRR. TT Every desired warehousing service.

OVERMYER WAREHOUSE 217 CHERRY ST.

Phone: CH 3-2266



TOLEDO, OHIO I

"OUICK SHIPPERS"

TOLEDO TERMINAL WAREHOUSE, INC.

128-138 VANCE STREET, TOLEDO 2, OHIO

20-130 VARCE STREET, TOLEDO Z, OMIO
Merchandise storage ♠ Pool car distribution ♠
Fireproof ♠ Private siding Nickel Plate Road
♠ Free switching ♠ Negotiable receipts ♠
Transit storage arrangements ♠ Motor truck
service ♠ Located in Jobbing district.

Member of A.W.A. — O.W.A. — Toledo C. of C.



YOUNGSTOWN, OHIO

Private Sidings Erie and P.&L.E.

EDERER



HAVE SOMETHING IN STORE for you . . . West Commerce St.—North to Belmont Aves., Youngstown 3, O.

OKLAHOMA CITY, OKLA.

TAX FREE TRANSIT STORAGE

GENERAL WAREHOUSE CORP.

1016 S.W. 2nd ST. OKLAHOMA CITY, OKLA.

PHONE: FORREST 50656

B. H. CLANTON, Mar.

OKLAHOMA CITY, OKLA, I

Established 1889 O. K. TRANSFER & STORAGE CO.







GENERAL WAREHOUSING AND DISTRIBUTION

TULSA, OKLA.

TAX FREE TRANSIT STORAGE

GENERAL WAREHOUSE CORP.

10 N. CHEYENNE, TULSA, OKLA. PHONE: GIBSON 7-5772 TWX: TU-1222 H. J. McKITTERICK, Mgr.

IN PORTLAND, OREGON

... Since 18

EXPERIENCED SHIPPERS USE HOLMAN

WAREHOUSING - DISTRIBUTION - TRUCKING 48 S. E. HAWTHORNE BLVD.



IN PORTLAND . GET THE JOB DONE RIGHT WITH...

1238 N. W. Glisan St. Portland 9, Oregon Phone CA 7-1281

WAREHOUSING . TRUCKING . DISTRIBUTION

Represented by: Distribution Service, Inc. PORTLAND, ORE.

"38 Years of Satisfied Customers"

"DON'T THINK RUSH - THINK RAPID"

Rapid Transfer & Storage Co.

907 N. W. IRVING ST. - - - PORTLAND, ORE.

DISTRIBUTION:

Private Terminal For Rail Cars.
Reciprocal Switching.
Prompt OS&D Reports.

STORAGE:

Sprinklered Buildings.
A. D. T. Protected.

Low Insurance Rate.
Prompt Service.

DRAYAGE:

Complete Hauling & Delivery Service.

Represented By: Associated Warehouses, Inc.
547 West Randolph St.
Chicago, III.
Rhandolph & 4458

Wirray Hill 9-7645

IN PORTLAND, ORE. IT'S Rudie
Wilhelm

1233 N. W. 12th AVENUE (9)
CApitol 7-0561

ALLENTOWN, PA. T

Member A.W.A.

Hummel Warehouse Company, Inc. 728-40 North 15th Street

Complete Merchandise Storage and Pool Car Distribution

Truck Service—P.U.C. and I.C.C. Certificates
Private Siding—L.V.R.R.

ALTOONA, PA.



We proudly announce the opening of our new modern all-purpose warehouse here in the heart of the Keystone State. Our aim is to give the best possible service and this aim is backed up by 25 years experience in the transportation field.

William W. Ward

- · Low insurance costs.
- 116,000 sq. feet all on one floor.
- · Sprinklered and ADT protection.
- Facilities for handling truckload, carload, and trailer-on-rail service
- 18' ceilings-No load limit.
- Daily delivery to Cental Pennsylvania points.
- 115,000 square feet of yard storage protected by Cyclone fencing.
- · Heated-Fireproof.

WARD

WAREHOUSING CORP.

TRANSPORTATION CENTER

ALTOONA, PA. - PHONE 9482

NFWA...

(Continued from Page 100)

as, "The need to attract into our industry bright young men capable of assuming future leadership."

However, he said, this objective has raised fears and antagonisms from members who, traditionally, expect their sons to assume that leadership.

"There is nothing wrong with our sons," Bradley said, "there just aren't enough of them!"

Bradley rounded off his answer to critics of this phase with manpower analogies from other industries, with reminders of competitive inroads, and with examples of diminishing profits despite increased business volume.

As for the activities of his group during the past year, he reported satisfactory initial contacts with seven colleges and universities. He said these activities would be continued and expanded.

Practical, economic application possibilities of the "Master Plan" were outlined by Jerome D. Ullman. He prefaced his remarks with the warning that unless the findings were accepted and applied the money spent on the three-phase program might well be poured down the drain.

The day's session was concluded by an address by Dr. H. A. Leedy, director, Armour Research Foundation of Illinois Institute of Technology.

Dr. Leedy reviewed the advantages of research in other fields, stressing the fact that, on an average, profitable returns were gained in about seven years. He expressed a belief that, for this industry, benefits could be expected in half that time.

The second day's sessions covered a report "Using the Economic Studies," by Alexander H. Naish, read by his son. Some of the many advantages were effectively exemplified by a color film showing high efficiency accomplished in the "A1" Naish warehouse.

This was followed by a panel on the NFWA Insurance Program, moderated by William S. Conklin. Panel members covered marine and group insurance problems, solutions, and applications.

Frank R. Burns, Jr., introduced a realistic picture of the problems the industry faced in its moving operations in a talk entitled, "The Warehouseman Looks At Transportation Competition."

The session was concluded by a panel on new design developments of highway vehicles. Panel members included, H. R. Stickel, The White Motor Co.; Rufus Jones, Trailmobile, Inc.; and Norman Rowe, Fruehauf Trailer Co.

Russell Garrett Speaks

Wednesday's session was launched by an inspirational talk by Russell Garrett of John F. Ivory Moving and Storage Co., and current president of the Movers Conference of America. He stressed the need for better management and better customer relations. Among other recommendations, he suggested an industry "Bureau of Standards" to aid in evaluating better techniques, equipment and personnel.

A very provocative paper was presented next by D. S. Woolley on the subject of "Government Packing and Crating Contracts." He went into considerable detail explaining his experiences, techniques, problems and their solution.

Military Report

Household goods movers and warehousemen were given a very candid account on their handling of military shipments by the next speaker, Maj. Gen. E. C. R. Lasher, executive director, Military Traffic Management Agency.

First, indicating the extent of military personnel movement, General Lasher said, "Of the approximately 30,000,000 Americans who move each year, over 10,000,000 are part of military families.

"The average weight per shipment for each military move of household goods is around 2,400 lb. The average distance moved is 1,500 miles, and we pay approximately \$264 for each such shipment.

"With the cost per hundredweight averaging \$11, we should be able to expect some approach to our ideal.

(Please Turn to Page 130)

BUTLER, PA.

C. W. NICHOLAS, Pres.

Est. 190

O. H. Nicholas Transfer & Storage Co.

324 So. McKean St.

Merchandise and Household Goods
Pool Car Distribution
Packing and Crating
Fran Switching

2 Warehouses 41,000 sq. ft.

ERIE, PA.



ERIE WAREHOUSE CO.

COMMERCIAL STORAGE AND POOL CAR DISTRIBUTION THROUGHOUT NORTHWESTERN PENNSYLVANIA & WESTERN N. Y. 1258 W. 18TH ST. TEL. 2-2957

ERIE, PA.I



M. V. IRWIN

MOVING AND STORAGE

OFFERS ERIE'S LARGEST AND MOST MODERN STORAGE AND WAREHOUSE FACILITY

DOORS ACCOMMODATE RAILROAD CARS, TRUCKS

• TRANSPORTATION • POOL CAR DISTRIBUTION
Phone: 2-4779

HARRISBURG, PA. [

INC. 1902

HARRISBURG STORAGE CO.

COMPLETE STORAGE & POOL CAR DISTRIBUTION SERVICE STORAGE IN TRANSIT

PENNSYLVANIA RAILROAD SIDING

HARRISBURG, PA.

HARRISBURG WAREHOUSE CO.

GENERAL MERCHANDISE STORAGE
POOL CARS DISTRIBUTED
BRICK BUILDING—LOW INSURANCE
STORE DOOR DELIVERY ARRANGED FOR
PENNA. R. R. SIDING
OPERATING KEYSTONE WAREHOUSE

LANCASTER, PA.

INC. 1906



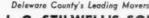
LANCASTER STORAGE CO. LANCASTER, PA.

Merchandise Storage, Household Goods, Transferrling, Forwarding

Manufacturers' Distributors, Carload Distribution,
Local and Long Distance Moving

Member of May, WA—PFWA

MORTON, PA. I





J. C. STILWELL'S SON

1 N. Morton Avenue, Morton, Pa.
(Philadelphia Suburbs)

MOVING-STORAGE-PACKING-CRATING
ONLY ONE OFFICE—Centrally located at
1 N. Morton Ave., Morton, Pa.
Telephone: KI 4-3600 Teletype Swarthmere, Pa. 1096

PHILADELPHIA, PA.

Member of A.W.A.-P.W.A.

COMMERCIAL WAREHOUSING CO.

Meadow and Wolf Sts.

Philadelphia 48

Complete Storage and Distribution Service
Private Siding Pool Car Distribution

Low Insurance Rates

PHILADELPHIA, PA. T

MACK WAREHOUSE CORPORATION

Penn & Unity Streets, Philadelphia 24, Pa. CUmberland 8-7010-7011

WAREHOUSING DISTRIBUTION

- ★ Over 800,000 square feet of ideal storage space
- ★ Four buildings in south, central and northeast sections of the city including convenient waterfront locations
- * Storage-in-transit
- * Pool car distribution
- * Export packaging
- * Mobile crane and fork lift equipment
- * Ample truck docks
- * PRR, RDG & B&O Railroad sidings
- * Experienced & efficient personnel

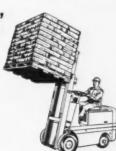
OTHER FACILITIES

Eavenson & Levering Company—Division of Mack Warehouse Corp., Camden, New Jersey 400,000 Square feet of well-planned storage space

Mack Transportation Company, Philadelphia, Pa. 400 Trucks, tractors and trailers

"MERCHANTS"

for smooth, economical distribution in Philadelphia



Select the "Merchants" services and facilities which best suit your needs. 11 big, modern, sprinklered, strategically situated warehouses—totaling 1,500,000 sq. ft. of storage area—located in Philadelphia's wholesale, shipping and distributing centers. Served by Penna., Reading, and B&O Railroads. Storage-intransit privileges by rail and water. Sheltered truck platforms. Free and bonded storage of all kinds of goods. Low insurance rates. Send for booklet and complete details.

MERCHANTS WAREHOUSE CO.

10 Chestnut St., Philadelphia 6, Pa.
Tel LOmbard 3-8070





Public

warehousing is profitable in

ADEI PHIA

Yes, we can prove to you that distribution through "Pennsylvania" is more flexible, efficient and economical than branch facilities. Here are 22 big, modern warehouses-strategically located to serve this key marketing area. Over 1,000,000 sq. ft. of free and bonded storage space: low insurance rates.

Workmen are careful and competent. Modern mechanized equipment moves the most difficult commodities safely and swiftly. Exceptional rail and highway facilities. One- to 10-ton trucks for fast store-door delivery. Write us today for full information about the money-saving advantages "Pennsylvania" offers you in Philadelphia.

DEPDESENTATIVES.

J. W. Terreforte, 250 Park Ave., New York 17 Henry H. Becker, 53 W. Jackson Blvd., Chicago 4



WAREHOUSING & SAFE DEPOSIT CO.

303 Chestnut Street . Philadelphia 6, Pa. . Tel. LOmbard 3-3893

RELAX...

let "Terminal" take over your distribution and storage worries in Philadelphia



You'll be amazed how "Terminal" can expedite your distribution in Philadelphia and the rich trading area surrounding it. Here you have not trading area surrounding it. Here you have not only eight huge, well-managed modern warehouses (over 1,600,000 sq.ft.), but also our big fleet of trucks for fast store-door delivery. Private siding connections with P.R.R. and the Reading, spacious truck docks. Mechanized handling by skilled personnel. U.S. Customs bonded space. Pool-car service. Storage-in-transit privileges. Here are all the facilities, services and transitions of the property of the proof for efficient low-cost distriexperience you need for efficient, low-cost distri-bution in this region. Write us today about your problems and requirements.

TERMINAL WAREHOUSE COMPANY 81 FAIRMOUNT AVE., PHILA. 23 • MArket 7-0160

NEW YORK 4: 2 Broadway-Bowling Green 9-0986 SAN FRANCISCO 7: 605 Third St.-Sutter 3461 CHICAGO 11: 251 E. Grand Ave.—Superior 7180

Represented by DISTRIBUTION SERVICE, INC.—an association of good varehouses located at strategic distribution centers

PHILADELPHIA PA 1

Established 1865

Gallagher's Warehouses, Inc.

708 South Delaware Avenue, Philadelphia 47 Merchandise Storage and Storage in Transit
Direct Siding-Penna, R.R. and Reading R. R.
Pool Car Distribution
Represented by Associated Warehouses, Inc.
New York (17)
Deliveries Chicago (6)
52 Vanderbilt Ave. City and Suburban 549 W. Randolph St
MUrray Hill 9-7643

PITTSBURGH, PA.

ED WERNER TRANSFER & STORAGE COMPANY 1917-19 Brownsville Road

Pittsburgh, Penna. Storage, Packing and Shipping Member of National Furniture Warehouse

Agent of Allied You Lines, Inc.



PITTSBURGH, PA. Vincent White Owner and Manager

2525 Railroad Street, PITTSBURGH 22

In the heart of Pittsburgh's Jobbing District

STORAGE IN TRANSIT B. & O. and P.R.R. SIDINGS COMPLETE TRUCKING FACILITIES A.D.T. PROTECTION

Terminal Company

2525 Railroad Street

Also Operators of WHITE MOTOR EXPRESS CO. Established 1918

SCRANTON, PA. I

Established 1974

MIFFLIN WAREHOUSE CO.

N. Washington Ave. & Pine St., Scranton, Pa. MODERN WAREHOUSE SERVICE

New one story structure, completely sprinklered and fully palietized.

Private eiding Erie Railroad. Pool car distribution. Experienced personnel.

SCRANTON, PA. 1

THE QUACKENBUSH WAREHOUSE CO.

100 W. Poplar Street, Scranton 3, Pa.

WAREHOUSING AND DISTRIBUTION since 1894 A. D. T. Protection STORAGE-IN-TRANSIT DL&W SIDING

WILLIAMSPORT, PA. [

Dial 2-4791 or TWX Williamsport 68

WILLIAMSPORT STORAGE COMPANY, INC. (Est. 1921)

Economy — Experience — Service — PRR Sidings
Specialized!—Storage-In-Transit!—Now!—Through Rates Protected
From West to Eastern Seaboard, N. Y., New England and Vice Versa
In The East: North to South and Vice Versa
Williamsport is Closer in Miles and Minutes to The Greatest U. S.
Market — 200 Miles Radius — 30%, U. S. Population
Member: AVL - NFWA - PMTA - PWA - PFWA - WCofC - WBMA - CPTO

COLUMBIA, S. C. T

Distribution Center of South Carolina



CAROLINA BONDED STORAGE CO.

ESTABLISHED 1928

General merchandise and household goods storage.

Pool Car Distribution, Private rail sidings. Sprinkler equipped warehouse.





Merchandise and Household Goods STORAGE and DISTRIBUTION

Modern Concrete Warehouse, 100,000 Square Feet of Storage Square. Private Tracks Connecting with All Railroad and Steamship Lines. Motor Truck Service. Low Insurance Rates.

CHARLESTON WAREHOUSE AND FORWARDING CORPORATION 16 HASELL ST., CHARLESTON, S. C. Telephone 2-2918 Vermber of 14 H. H. E. Vins H.

CHATTANOOGA, TENN, I

Telephone 5-3655

Chattanooga Warehouse & Cold Storage Co.

1208 King Street, Chattanooga 2, Tenn.

Merchandise and Cold Storage

Pool Car Distribution-In-Transit Storage

Member of AWA-American Chain of Warehouses

MEMPHIS, TENN.

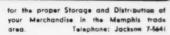
JOHN T. MAYER WAREHOUSE & TERMINAL, INC.

1157 TERMINAL
BONDED WAREHOUSE
MODERN ONE STORY—SPRINKLERED
COMPLETELY MECHANIZED

• AUTOMOBILE • APPLIANCE • HEAVY EQUIPMENT
POOL CAR DISTRIBUTION & STORAGE IN TRANSIT
Located on the Frisco-Illinois Central & Missouri Pacific & L&N
with Reciprocal Switching

MEMPINS TENN

COMPLETE WAREHOUSE FACILITIES





POOL CAR DISTRIBUTION We invite your Inquiries

CHICAGO OFFICE, 53 W. Jackson Blvd. NEW YORK OFFICE, 250 Park Avenue

MIDWEST TERMINAL WAREHOUSE CO. 61 West Georgia Avenue, Memphis 5, Tenn.

Owned and Operated by the ST. LOUIS TERMINAL WAREHOUSE CO. ST. LOUIS MO.

MEMPHIS

250,000 sq. ft. IC, MP, FRISCO. Every desired warehousing service.

OVERMYER WAREHOUSE

36 W. CALHOUN

Phone: JA 6-4252



MEMPHIS, TENN.

W. H. DEARING, President

POSTON WAREHOUSES, INC.

Established 1894

671 to 679 South Main St., Memphis 2

Insurance Rate \$1.20 per \$1,000 per Annum. Distribution a Specialty Merchandise storage, dependable service, free switching. Local cartage delivery. Illinois Central and Cotton Belt Railway tracks. Automatic sprinkler. A.D.T. watchmen.

MEMPHIS, TENN. J. W. HULL, Pres. S. A. GODMAN, V. P. & Gen. Mgr. UNITED WAREHOUSE & TERMINAL CORP.

Warehouse No. 1 Warehouse No. 2 137 E. Calhoun Ave. 138-40 St. Paul Ave. MEMPHIS. TENESSEE

MEMPHIS, TENNESSEE

Storage (Mdse.)—Pool Car Distribution—Local delivery service—Office
Space. In the heart of the wholesale district and convenient to Rail,
Truck and Express terminals. Eight car railroad siding—(N.C.&ST.L. and
L&N.)—Reciprocal switching A.D.T. Service. Represented by Distribution
Service, Inc. Member of A.W.A. and M.W.A.

MEMPHIS TENN I

VAIDEN WAREHOUSE

693-699 So. Main St., Memphis 2, Tenn.

Merchandise Storage

Brick, Concrete, Sprinklerod Warshouse, ADT Automatic fire alarm. Private siding: III. Central, Stt. & SW RR. Consign shipments via any RR. Peel car distribution Branch office facilities.

Mamher Southeastern Assn

NASHVILLE, TENN, I



MERCHANDISE WAREHOUSING POOL CAR DISTRIBUTION

SINGLE STORY OPERATION FULLY MECHANIZED SPRINKLER & ADT PROTECTION LOW INSURANCE RATES

American Chain of Warehouses Inc., American Warehousemens Association, Southeastern Warehousemens Association, National Furniture Warehousemens Association, Allied Van Lines, Inc.

OND.CHADWELL

Alpine 5-2738

NASHVILLE 1. TENN.

NASHVILLE, TENN. 2605 Charlotte Ave., Nashville 1

Central Van & Storage Co.

MERCANTILE AND HOUSEHOLD STORAGE WAREHOUSE STOCK and POOL CAR DISTRIBUTION

Automatic Sprinkler System-Centrally Located

AMARILLO, TEXAS

ARMSTRONG TRANSFER & STORAGE CO., INC.



P. O. Box 1860 Merchandise Storage & Distribution Household Goods Storage, Long Distance Operators

Members: A.W.A.-A.C.W.-H.F.W.A.-S.W.T.A.
Agents—Allied Van Lines



AMARILLO, TEX.

McKNIGHT Warehouses Incorporated General Offices 901 Grant St.



Mdse. Stg. & Distr. Whse #2

901 Grant St. Santa Fe Private Siding

Household Goods Whse #1

108 Taylor FW&DC Railway

Amarillo's Most Modern Fireproof Constructed Warehouse

DALLAS, TEXAS I

THE BIG WHEEL IN THE SOUTHWEST **SINCE 1875**

Our 82nd Year Gus K. Weatherred, Pres. C. E. Bradley, Vice-Pres. Modern Fireproof Construction—Office Displays,
Manufacturers, and Warehouse Space.

MEMBERS: A.W.A., N.F.W.A., American Chain of Warehouses, Southwest Warehouse & Transfermen's Assn., Rotary Club.

Operating H. & N. T. Motor Freight Line.
Allied Van Lines, Inc., Agent.



UNIT SANTA FE BUILDING

DALLAS, TEXAS I

INTERSTATE-TRINITY WAREHOUSE COMPANY

Marchandica Storage and Distribution

Hanrahald Goods Storage Maying & Packing

Long Distance Hauling



EL PASO, TEXAS

EL PASO TERMINAL WAREHOUSES, INC.

Mamber American Warehousemen's Assa



A COMPLETE SERVICE IN MERCHANDISE STORAGE AND DISTRIBUTION SINCE 1911

> NORMAN W. NABLO Pres. & Gen. Manager 421 Frederick St.



EL PASO, TEXAS "Bankers of Merchandise" "Service With Security"

International Moving & Warehouse Co. 1601 Magoffin Ave.

Inc. in 1920 El Paso, Texas



Lowest Content Insurance Rate
Fireproof Storage of Household Goods, Autos & Merchandise, State and Customs Bonded. Private Trackage—T. & P.
and So. Pac. Rys. Pool Car Distribution—Motor Truck Service.
Members—NFWA—SWTA—Agent for AVI.

FORT WORTH, TEXAS

In Fort Worth It's Binyon-O'Keefe

MERCHANDISE STORING-POOL CAR DISTRIBUTION Our modern Centrally located warehouse is completely equipped to serve you with aver 200,000 sq. th. of merchandise and household storage space MOVING—STORAGE—PACKING—SHIPPING



BINYON-O'KEEFE

STORAGE CO.



POOL CAR DISTRIBUTION MERCHANDISE AND HOUSEHOLD GOODS STORAGE







FORT WORTH, TEXAS

Complete Mechanized

Merchandise Storage—Pool Car Distribution



Centrally Located to Wholesale Trade

Adequate Truckage, Doors and Docks

FORT WORTH WAREHOUSE & STORAGE CO., INC.

* L. C. ABBOTT, President and Gen. Mar.



HOUSTON, TEXAS

"Service with Reliance"

AMERICAN

Warehouses, INC.

P. O. Bax 1772 • 1918 Collingsworth • Phone: CApitol One Floor—Car Level—330,000 Square Feet—Fully Sprinklered. A Adequate Truck and R. R. spots. Member A.W.A. & S.W.T.W.A. Phone: CApitol 8-6381 Chicago 7, III., CAnal 6-3544

M. H. Finger, 519 W. Roosevelt Road New York 17, MUrray Hill 7-4975 Linne Johnson, 202 E. 44th St.

HOUSTON, TEXAS

New Location-Improved Facilities

DUSION, ILANS

BETTER WAREHOUSING IN HOUSTON

Our new warehouse is 800 feet long by 250 feet wide with car spot on
the Mo. Pac. R.R. for 20 cars at one time. Plenty of truck dock space
with wide area to maneuver trucks and trailers.
This modern one-story property with high ceilings and unlimited floor
load capacity is fully equipped with modern materials handling apparatus.

HOUSTON CENTRAL WAREHOUSE and COLD STORAGE CO.

100 Middle Street W. S. MONDAN AND MALES DISTRIBU

PROFIE ... HOUSTON Houston 1, Texas

HOUSTON, TEXAS

Houston Terminal Warehouse & Cold Storage Company
701 No. SAN JACINTO ST., HOUSTON 2
General Storage Cold Storage U. S. Customs Bonded

Pool Car Distribution A. D. T. Service Parking Space Office Space Display Space Lowest Insurance Rate

New York Representative Phone YUkon 6-7722

Chicago Representative Phone HArrison 7-3688

Houston ts

HOUSTON

Warehouse Service 905 Live Oak Street

And For Pool Car Distribution

HOUSTON

Freight Service INCORPORATED 2121 Congress Avenue

COMPLETE WAREHOUSE & DISTRIBUTION SERVICE

HOUSTON, TEXAS T



PATRICK TRANSFER & STORAGE CO.

1117 VINE STREET, HOUSTON 2

Merchandise and Household Goods Storage Pool Car Distribution Sprinklered—A.D.T. Watchmen
Shipside and Uptown Warehouses
A Fisher G. Dorsey Interest
Member of N.P.W.A.—State and Local Ass'ns.



HOUSTON, TEXAS I

A. C. "SPARK" CARTER

TEXAS SERVICE WAREHOUSE COMPANY 702 & 710 Pine Street

Private Rail Sidings - All Houston Railroads General Merchandise — Storage and Distribution A.D.T. Supervisory Service Sprinklered Throughout

HOUSTON, TEXAS

UNION TRANSFER & STORAGE COMPANY

HOUSTON MERCHANDISE MART

2202 Nance Street

P. O. Box 305 SPRINKLERED THROUGHOUT -- SUPERVISED BY A.D.T.
MOST MODERN FACILITIES IN SOUTHWEST
OFFICES YEAR AROUND AIR CONDITIONED
MERCHANDISE STORAGE EXCLUSIVELY A FISHER G. DORSEY INTEREST



HOUSTON, TEXAS UNIVERSAL TERMINAL WAREHOUSE CO. 1002-1008 Washington Ave., Houston

Merchandise Storage—Pool Car Distribution—Drayage Service
A.D.T. Central Station Automatic Supervisory
Sprinkler, Waterflow, and Fire Alarm Service
Watchmen, U. S. Customs Bonded, Office Space
Represented in all principal cities by
UNIVERSAL CARLOADING & DISTRIBUTING COMPANY
Division of
UNITED STATES FREIGHT CO.
Members State and Local Associations

HOUSTON, TEXAS I

Member: A.W.A.-S.W.&T.A.-M.W.A.

WALD TERMINAL WAREHOUSE CO., Inc. Bonded Warehouses — 175,000 Sq. Ft. 02-920 Live Oak St., Houston 1, Texas Established 1914



MERCHANDISE STORAGE . POOL CAR DISTRIBUTION Represented by: Distribution Service, Inc.
New York—Chicago—San Francisco
EXPERIENCE • SERVICE • RESPONSIBILITY

HOUSTON, TEXAS [

BENJ. S. HURWITZ, Pres.

WESTHEIMER





Merchandise & Household Goods Storage—Pool Car Distribution.
Lift Van Service—20 ear lengths of trackage.
Warshouse—A.D.T. Authenatis Firs and Burglary Protection
Members N.F.W.A.
Agent for Allied Van Lines, Inc.
State and Local Assn.

WICHITA FALLS, TEXAS

POOL CAR DISTRIBUTION Since 1920

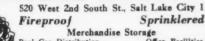
Spot stocks of Grocer Lines a Specialty

TARRY WAREHOUSE & STORAGE CO.

Wichita Falls, Texas Members: SWATA-NFWA-AVL

SALT LAKE CITY, UTAH [

CENTRAL WAREHOUSE



Sprinklered Merchandise Storage Pool Car Distribution

Momber A.W.A. Office Pacilities



HAMPTON, VA.

Serving Tidewater Virginia

TRANSFER & STORAGE CO., INC. **BROOKS** 1928 W. Pembroke Ave.

40,000 sq. ft. floor space. Low insurance rates. Mdse, warehousing and distribution. Private railroad siding. Pool car distribution. Freight truck line. Household goods stored, packed, shipped. Van service to all states.

UNITED VAN LINES NATIONAL FURNITURE WAREHOUSEMEN'S ASSO.

NORFOLK VA.

Fine Warehousing Since 1914

Security Storage and Van Co.

500-530 FRONT STREET

COLLECTIONS POOL CARS DISTRIBUTION MOTOR VAN AND LIFT VAN SERVICE Member-Nat'l, F.W.A. - Allied Van Lines

NORFOLK, VA. I

Established 1892

Phone: MAdison 2-2619

SOUTHGATE STORAGE CO., INC.



SOUTHGATE TERMINAL P. O. Box 840

MERCHANDISE



- · Centrally Located · Private Trackage
- Pool Car Distribution · Local Truck Delivery Service Custom Bonded Space
 - Negotiable Receipts

Represented By American Chain of Warehouses

NEW YORK 250 Park Ave. YUkon 6-7722 53 W. Jackson Blvd. HArrison 7-3688

RICHMOND, VA. T

79 Years of Continuous Service

BROOKS

TRANSFER & STORAGE CO., INC. 1224 W. Broad St.

3 storage warehouses 81,000 sq. ft. floor space, Low insurance rates. Mdse. warehousing and distribution. Private railroad siding. Pool car distribution. Freight truck line. Household goods stored, packed, shipped. Van service to all states.

Member:

UNITED VAN LINES NATIONAL FURNITURE WAREHOUSEMEN'S ASSO.

ROANOKE, VA. 1

OLD DOMINION STORAGE WAREHOUSE, Inc.

Rognoke, Va. 2502 Patterson Ave., S. W.

> GENERAL MERCHANDISE STORAGE POOL CAR DISTRIBUTION FIREPROOF BUILDING LOW INSURANCE RATES PRIVATE SIDING N. & W. R. R. AMPLE TRUCK DOCKS COMPLETELY PALLETIZED

The Most Logical Distribution Point for Virginia, West Virginia, North Carolina and Tennessee

ROANOKE, VA.

Agent: Allied Van Lines, Inc.

PITZER TRANSFER, STORAGE & FUEL CORP.

403-411 W. Salem Ave., Roanoke 5

Capacity 500 Cars Private RR Siding Automatic Sprinkler Accurate Accounting



We make a specialty of Storage and Pool Car Dis-tribution for Agents, Brokers and General Merchandise Houses.

Represented by: American Chain of Warehouses, Inc.

SEATTLE, WASH.

Pacific National ouses in Tacema Seattle Spokane Kennewick Butte Helena Boise Portland Boise Portraine Medford Eugene Vancouver Oakland Vancouver Oakland San Francisco Sacrament

Division of Pacific National Warehouses, Inc. EATTLE

TRANSFER CO. 2 HANFORD STREET

LLOYD TRANSFER CO. Pool Car Division

STANDARD WAREHOUSE CO Storage Divisio

SEATTLE, WASH,

TAYLOR-EDWARDS WAREHOUSE & TRANSFER CO., INC.

DISTRIBUTION

1020 Fourth Avenue South

Seattle 4

WAREHOUSING

TRUCKING

Represented By
DISTRIBUTION SERVICE, INC.
New York—Chicago—San Francisco

SPOKANE, WASH, I

TAYLOR-EDWARDS WAREHOUSE & TRANSFER CO., INC.

800 N. Hamilton St. WAREHOUSING

DISTRIBUTION

Snokane 11 TRUCKING

Represented By
DISTRIBUTION SERVICE INC.

New York-Chicago-San Francisco

TACOMA, WASH, [

1721 JEFFERSON AVE., TACOMA 2

YOU CAN SAVE MONEY BY USING TACOMA

GREEN BAY, WIS.

ESTABLISHED 1903

GREEN BAY 1401-55 S. STATE ST. . WIS



Merchandise Storage Pool Car Distribution Transit Storage Household Goods Storage Heated-Unheated-Yard Storage

Waterfront Facilities Stevedore Services

U. S. Customs, State and Public Bonded 70 Car Track Capacity Modern Handling Equ ment Equip-

Private Siding on C&NW CMStP&P, GB&W Lines Reciprocal Switching all

Complete local and over-the-road truck services with 70 units of all types of equipment, including low-bed trailers, winches and cranes.

ACRO MAYELOWER MOVING AND STORAGE

MADISON, WIS.

2302 Darwin Road

Phone Cherry 4-6255

OF MADISON INC

MODERN ONE STORY OPERATION

Member AWA, NFWA

PACIFIC STORAGE, Inc.

Complete facilities—5 locations including 2 on water-front—special arrangements for serving Alaska—pool car distribution—local cartage—customs bonded— Agents Allied Van Lines.

MILWAUKEE, WIS. Private Phone: BRoadway 1-8930

AMERICAN WAREHOUSE CO.

General Office-525 E. Chicago St.

3 Clean, Well-Equipped Warehouses
Pool Car/Truck Distribution Specialists

Customer Preference-Our Best Reference Private Siding: C & NW Ry. 3rd Ward Dist.

NE WA ...

(Continued from Page 124)

Instead, we find the service actually is less than the optimum desired.

"Just as an example, let me quote the figures we have compiled for a single month—November, 1956:

"1. Of all the discrepancies reported on movement of household goods, 33 per cent resulted from inadequate packing.

"2. Poor loading accounted for 13 per cent.

"3. Improper stowage caused 9 per cent

"4. Rough handling, another 9 per cent.

"Fully 64 per cent of all discrepancies reported to our offices were caused by professional inadequacies."

Then the general went into a detailed discussion of rates. First, he pointed out that the intent of ICC section 22 "as not to provide for the transportation of government-owned goods or sponsored cargo at rates which would prove detrimental.

Rate Tenders

General Lasher then explained that when the government invites rate tenders, "we are not calling for bids, we are simply asking for rate offers."

He gave several examples of rate

bidding. One of these referred to a mass movement of household goods from Fort Bragg, N. C., to Fort Devens, Mass. "We proposed a rate of he said. "Five carriers re-\$6.15," sponded, but not one quoted our proposed rate. Instead, the rates tendered ranged from a low of \$5.48 to a high of \$6.05"

The general concluded his remarks urging his listeners to improve their professional and business standards (referring specifically to such practices as "inflated accessorial charges, padded weights," etc.); not only with the government but, also with the individuals moved. In the latter case, he made special reference to not informing the household goods owner of his legal limit of liability of 30 cents a pound.

"Have you ever tried to replace a grand piano or a deep freeze unit for 30 cents a pound?" he asked.

Public Law 245

The Wednesday morning session concluded with an excellent detailed interpretation of Public Law 245, which provides for increased use of commercial storage facilities by the government. Frank Pellegrino read a report prepared by Vincent Caputo, staff director, Supplies and Logistics, Office of Secretary of Defense, on the history, progress and status of the law.

Reports also were made by Wood-

row Wilson, Office of the Quartermaster General, Household Goods Storage Office, and field officers representing most of the 18 field offices.

The afternoon session was in the nature of an open forum with a panel of industry, military and other government agency representatives. The panel was moderated by J. R. Harkins, Office of the Assistant Secretary of Defense.

Harkins mentioned that the application of the law, which went into effect November, 1956, uncovered unanticipated questions and problems but these now were being worked out satisfactorily.

"One of the benefits that the law is expected to provide," explained Harkins, " is uniform contracts and specifications throughout the country. We also hope to provide better protection and service to military personnel in the storage of their household goods."

Ladies Speak

A separate program was arranged for the ladies. Two speakers who highlighted that program were, Mrs. O. G. Schaefer, Rochester Transfer and Storage Co., and Mrs. Kath M. Fetter, Fetter Storage Warehouse, Inc.

Mrs. Schaefer's topic was, "The uman Side of Warehousing." Mrs. Human Side of Warehousing. Fetter spoke on "A Woman's Place in Warehouse Operations.".

MILWAUKEE, WIS.

FLagstone 1-6673

BAY-NEL TERMINAL

3119 W. Mill Rd.

Milwaukee 9. Wisc.

Warehousina — Distribution — Private Rail Siding Modern One Story Building











ALSO LEASE RENTALS OF WHOLE BLDGS. OR PARTS SO. WATER & E. BRUCE STREETS

MILWAUKEE, WIS. [

-Phone Marquette 8-7091

TERMINAL STORAGE CO.

100-112 W. Seeboth St. Milwaukee 4, Wisconsin

Cooler, Freezer and General Merchandising Storage Deep Water Dock, Private Siding on C.M.St.P. & P.R.R.

SHAWANO, WIS. Modern Building, Reinforced Concrete Construction

SHAWANO TERMINAL WAREHOUSE

Shawano, Wisconsin

120 E. Richmood Street Shawa General Merchandise Storage INSURANCE LOW OW INSURANCE RATES

ed and Bonded. Private Siding Chicago & Northwestern R.R.

CANADA

TORONTO, ONT. |

Established 1913

TORONTO'S LARGEST

Merchandise Storage and Distribution Specialists



HOWELL WAREHOUSES LIMITED

Head Office: 222 FRONT ST. EAST TORONTO 2, CANADA Telephone: EMpire 4-0111 Member of Canadian Warehousemen's Association

TORONTO, ONTARIO TERMINAL WAREHOUSES LIMITED

Refrigerated Office Space Mevedoring Rail Sidings Fireproof.

ings Free Switching
Lowest Insurance
207 Queen's Quay - EM: 3-3411



TORONTO, ONT. [

ENQUIRIES INVITED

TORONTO STORAGE CO. LIMITED

(Established 1916) Toronto 2, Ont. (Established 1916)

2/16 Berkeley St. Toronto 2, Ont
General Merchandise—Bonded & Free
1,500,000 cubic feet. Sprinklered.
Private Siding. Efficient Loading Facilities.
Company Owned Trucks.
Members of Canadian Warehousemen's Association.
"Our Clients do the selling—we do the rest."

MONTREAL, QUE.

St.Lawrence Warehouse



A-VAN HORNE AVENUE, MONTREAL CANADA 10,000 SQ. FT. OF MODERN FIREPROOF SPACE LOCATED IN THE EXACT CENTER OF THE CITY OF MONTREAL Concidion Customs Bended. Private Siding — 8 Car Capacity — Free Switching — All Railroad Connections.

ALLIED DISTRIBUTION, INC.

What Can . . .

(Continued from Page 47)

Cushioned Underframing

There are relatively few cars in service that have cushioned underframing. There are still fewer cars that have vibration dampening trucks.

In experiments to locate damage causes we have used a number of GAEX and GARX cars. These cars are equipped with Duryea underframes and Chrysler trucks. Results were good. Relatively few shipments were damaged, and damage was minor. (Unfortunately these cars are equipped with 8-ft doors, which creates a loading problem when long loads are involved.)

In citing results of our experiments, we are not trying to sell any particular make of underframe, truck, or car. We are trying, rather, to sell the idea that cushioned underframes and trucks which dampen vibrations must be made integral parts of all railroad equipment purchases in the future.

Steps to Correct

Steps for solving the problem of rail companies as well as the shipping public are:

- 1. Concentrate more on crew training.
- 2. Intensify experimentation with new types of equipment.
- 3. Bring results of these experiments to the attention of those in authority.
- 4. Develop free interchange of information
- 5. Develop free interchange of cars so equipped.
 - (Resume Reading on Page 48)

All Delta Flights Carry airFREIGHT



Serving 60 Cities in

Leading companies in nearly every field have learned how to improve distribution, build sales and cut costs with Delta airfreight. Find out what flying freight can do for you, how to "air" your shipping problems. For answers to specific questions—or complete shipping analysis, free—call your local representative of Delta airfreight. Or write to:



airFREIGHT Dept., Atlanta Airport, Atlanta, Georgia

CLASSIFIED ADVERTISING

RATES: 20¢ a word—\$5 minimum

SALE OR LEASE

FOR RENT—Excellent storage warehouse, Bristol, Pa. 12 to 85,000 feet, 10 acres of land. One story, high ceilings, heated, sprinklered, traveling cranes, "PRR sidings, Del. Yalley Inferchange Turnpike. Write Box 221, DISTRIBUTION AGE, Chestnut & 56th Sts., Philadelphia 39, Pa.

WAREHOUSE FOR SALE—Two-story brick and concrete warehouse, with office space, 34,000 sq ft on 27,000 sq ft ot. Downtown Washington, D. C. 60 Florida Ave., N.E. Available June 15, 1957. Communicate with RAYMOND BODDIE, P.O. Box 713, Coral Gables, Fla.

DO YOU HAVE A WAREHOUSE OR BUILDING THAT NEEDS HEAT?—For Saie: Six almost new 2,000,000 BTU/hr, Model HD-2000 Lee oil fired industrial space heaters. Manufactured new in 1952 and used for one season and Complete with all controls and 15 hp 3/60/220-440 blower motors. Price FOB Chicago \$1600 each. ESTES MACHINERY CO., 821 W. Lake St., Tel.: Monroe 6-1814, Chicago 7, III.

Index of 1957

General Advertisers

Acme Steel Co. Devion Div. 29 Aero Mayflower Transit Co., Inc.... American District Telegraph Co... 18 American Engineering Co. 96 American Trucking Associations, Inc. 28 Anthony Company 97 Automatic Transportation Co..... 4-5 Ballymore Company Baltimore & Ohio Railroad 27 Buda Div., Allis-Chalmers Mfg. Co. Second Cover Buschman Company, E. W. 97 Butler Manufacturing Co. 96 Central Motor Lines 94 Chicago, Rock Island & Pacific Clark Equipment Co., Ind. Truck Div. 17. 19 & 81 Colson Corporation, The 80 Continental Air Lines14-15 Cooke Warehouse Corp., J. Leo. . 88 Denver Chicago Trucking Co., Inc. Back Cover Dodge Div., Chrysler Corp. Equipment Manufacturing, Inc..... 87 Exide Industrial Div.—The Electric Storage Battery Co. 6-7 Gerrard Steel Strapping Div., U. S. Steel Corp. Greyvan Lines, Inc. 34 Hough Co., The Frank G. Hyster Company 30 International Harvester Co. Kaar Engineering Corp. 94 Kelley Company, Inc. KLM Royal Dutch Airlines...... 82 Lamson Corporation 95 Lewis-Shepard Products, Inc. Lift Trucks, Inc. Link-Belt Company Loomis Machine Co. 94

М
M-H Equipment Company
Magline, Inc.
Magnesium Co. of America
Materials Handling Division 21
Magnesium Co. of America, Tobey
Aluminum Division 83 Materials Handling Exposition 74
Mead Corporation, The 90
Mercury Manufacturing Co35-36
Micron, Inc
Milwaukee Road, The
Missouri Pacific Lines
Moto-Truc Co., The
N
Nickel Plate Road
P
Pallet Vault Corp
Port of Los Angeles
Portland, Ore., Commission of Public Docks
Pullman-Standard Car Mfg. Co
R
Raymond Corporation, The 95
Ready-Power Company 84
Remington Rand Div., Sperry Rand
Corp
Revolvator Company
,
5
San Francisco Warehouse Co 92
Slick Airways, Inc
Spector Freight System, Inc22-23 Standard Pressed Steel Co
Standard Pressed Steel Co
Sturdi-Bilt Engineering Co 89
т
Titan Pallet Co., Inc.
Toledo, Peoria & Western Railroad
Towmotor Corporation
Trans World Airlines Third Cover
fl.
Union Pacific Railroad
United Air Lines
w
Weber Addressing Machine Co.,
Inc 93
White Motor Company
Υ
Yale & Towne Mfg. Co 8-9

For Warehouse Advertisers See Pages 102 to 131

ALONG THE WAY ... OF TWA



"SPIRAL GUIDES" SPEED TO EUROPE'S SEWING MACHINES

ÔVERNIGHT!

SHIPPED TODAY ... INSTALLED TOMORROW! FAST TWA AIR FREIGHT SERVICE SUPPLIES GROWING EUROPEAN DEMAND FOR SPIRAL- STITCH SEWING . MACHINE ATTACHMENTS ..! DEPENDABLE TWA DELIVERY BRINGS QUICK PAYMENT TO GUIDE STITCH CORPORATION. RARITAN, N.J., MANUFACTURER. ASSURES GREATER PROFIT BY LOWERING PACKAGING AND INVENTORY COSTS!

SHIP AT LOW, SPECIFIC, COMMODITY RATES ... SHIP TWA AIR FREIGHT!

SHIPPING ABROAD?

TWA OFFERS MORE THAN 60 TRANSATLANTIC CROSSINGS EVERY WEEK ... INCLUDING ALL-CARGO

SKY MERCHANT SERVICE

BETWEEN MAJOR U.S. CITIES AND EUROPE!



DELIVERY OF YOUR SHIPMENTS THROUGHOUT THE COUNTRY.

BOOK THEM ON TWA SUPER CONSTELLATION

FLIGHTS ...





All **TWA** Flights Carry Air Mail, Air Express and Air Freight





Goes Straight Through COAST-TO-COAST

with NON-STOP, 2-MAN SLEEPER CABS One Carrier Responsibility ALL THE WAY!

